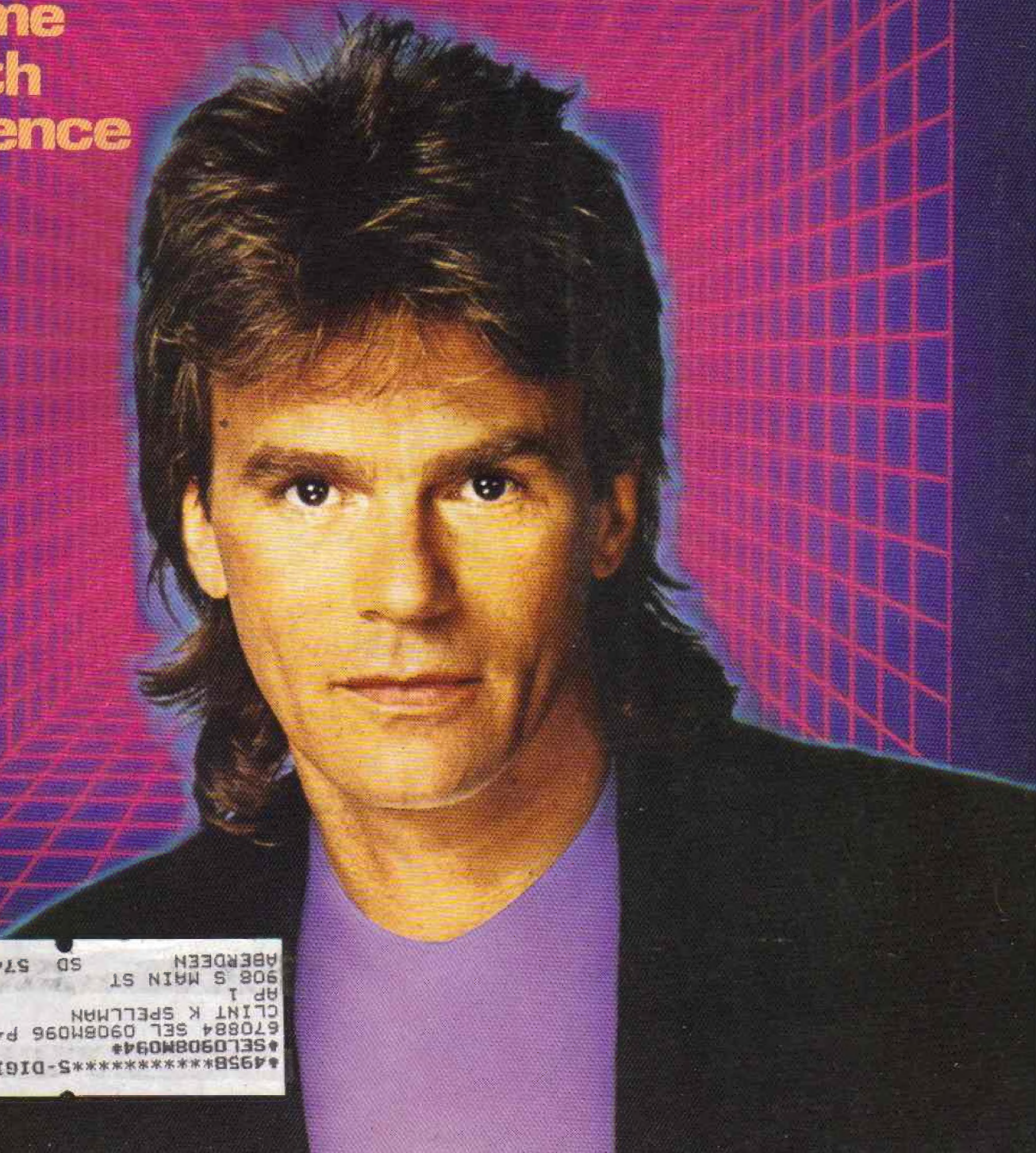


3·2·1·Contact

MACGYVER

Fighting
Crime
With
Science



4958*****5-DIGIT 57401
SEL0908M094
670884 SEL 0908M096 P448 SEP89
CLINT K SPELLMAN
AP 1
908 S MAIN ST
ABERDEEN SD 57401

Campbell's Can-Do Puzzle Page

More fun for all kinds of Campbell's Kids™

What kind of Campbell's Kid™ are you?

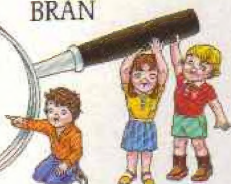
1.

Are you a smart kid?

By changing just one letter in each of the words below, you can come up with a list of some of the vegetables in Campbell's® Chicken Alphabet Soup:



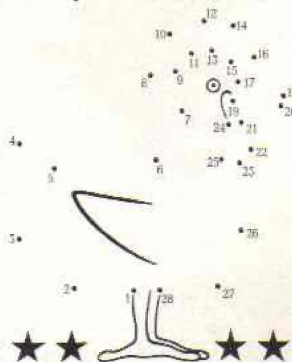
PARROT
COIN
PEN
BRAN



4.

Are you a curious kid?

Connect the dots and you'll find the perfect ingredient to team up with stars in Campbell's® Soup.



2.

Are you a playful kid?

These Campbell's Kids™ are going out to play sports, but one of them doesn't belong with the group. Can you pick him out?



5.

Are you a careful kid?

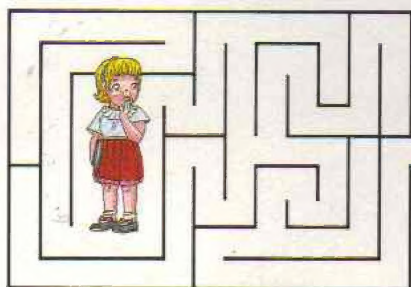
Carefully study this can of Campbell's® Soup and its mirrored reflection. Can you find something wrong with the reflection?



3.

Are you a helpful kid?

Help the Campbell's Kid™ find her way out of the maze and home in time for lunch.



6.

Are you a happy kid?

You will be when you unscramble the letters and discover a delicious part of Campbell's® Alphabet Soup.



ANSWERS

1. CARROT, CORN, PEA, BEAN
2. The kid in the raincoat — he's not dressed for sports.
3. 3.
4. It's a chicken.
5. "Campbell's" is not reversed.
6. Meatballs.

Look for more fun and games inside the labels of Campbell's® Kids' Soups.

© 1989 Campbell Soup Company



M'm! M'm! Good!®

Publisher
Nina B. Link

Editor-in-Chief
Jonathan Rosenbloom
Art Director
Al Nagy
Senior Editor
Eric Weiner
Associate Editor
Elizabeth Keyishian
Assistant Editor
Russell Ginns
Assistant Art Director
LaVon Leak
Editorial Assistant
Sheila Sweeney

Director of Research/Magazine Group
Dr. Istar Schwager
Magazine Research Manager
Tony Wilsdon

Director/Creative Services
Aura Marrero

Vice President General Manager
Bill Hitzig
Director of Finance
Julie K. Andersen
Circulation Director
Kathleen O'Shaughnessy
Subscription Manager
June Wick
Promotion Manager
Jill Schiffman
Production Director
Carlos N. Crosbie
Production Manager
Frances Chan

Advertising Director/Magazine Group
Linda Vaughan
National Sales Manager
Gail Delott
Advertising Sales Category Manager
Karen Siegel Gruenberg
Senior Advertising Representative
Joy Hall
Advertising Research Coordinator
Alecia Lane-O'Neill

ADVISORS

Dr. Gerald S. Lesser
Professor, Harvard Graduate
School of Education
Dr. Charles Walcott
Director, Lab. of Ornithology,
Cornell University
Dr. Jeanel Walker
Professor of Physics,
Cleveland State University
Dr. Charles A. Whitney
Professor of Astronomy,
Harvard University

ADVERTISING SALES OFFICE

Advertising Director/Magazine Group
Linda Vaughan
3-2-1 Contact Magazine
One Lincoln Plaza
New York, NY 10023
(212) 595-3456



Winner/National Magazine Award
General Excellence



Award Winner/Feature Category

3-2-1 Contact (ISSN 0195-4105) is a publication of the Children's Television Workshop, published ten times during the year, monthly except for February and August. © 1989 Children's Television Workshop. All rights reserved. All contents owned by the Children's Television Workshop and may not be reprinted without permission. 3-2-1 Contact is a trademark and a service mark of the Children's Television Workshop. Printed in the U.S.A. Number 94, March 1989. Editorial offices, One Lincoln Plaza, New York, N.Y. 10023. Send subscription orders to 3-2-1 Contact, P.O. Box 53051, Boulder, CO 80522-3051. POSTMASTER: Send address changes to: 3-2-1 Contact, P.O. Box 53051, Boulder, CO 80522-3051 (including label from cover of magazine). Subscriptions: 1 year U.S.A. \$15.97; Canada and other countries add \$6. Second-class postage paid at New York, NY and additional mailing offices. Bulk copy rates to schools and other institutions available on request.



3-2-1-Contact



Page 26



Page 41

Page 6



Page 35



Featuring This Month

- 6** Lost Treasure: The Search for Missing Millions
- 12** Wanted! Six of the World's Missing Treasures
- 14** Break This Code!
- 18** Science Saves the Day on MacGyver
- 26** Turtle Watch: CONTACT Takes A Turn at Saving Turtles
- 46** Go Fly A Kite!

Square One TV Special Section

- 35** Star Trick
- 36** The Phoneymooners

- 39** Blackstone's Magic Page
- 40** Mathnet Mini-Mystery

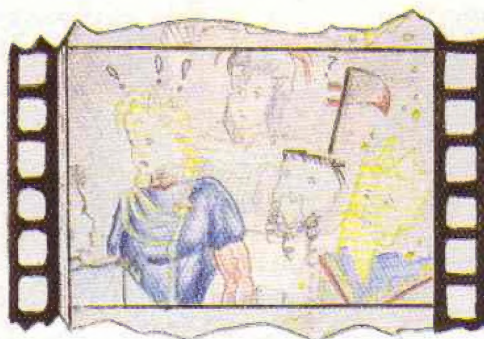
Departments

- 2** Mail
- 4** TNT: Tomorrow's News Today
- 16** Factoids
- 22** Any Questions?
- 30** The Bloodhound Gang
- 34** Contact Lens
- 41** Reviews
- 42** Basic Training
- 44** The Slipped Disk Show
- 45** Extra!
- 48** Did It!

Cover: Background photo by
L. Manning/West Light

Contest Roundup

We'd like to thank all of our readers who entered two of our recent contests. Here are some entries that warmed our hearts during the long winter months.



A messenger brings news. Someone is stealing Micklean's treasure?

We were really impressed by **Esther Watson** of Sachse, TX. She sent us Just Desserts.

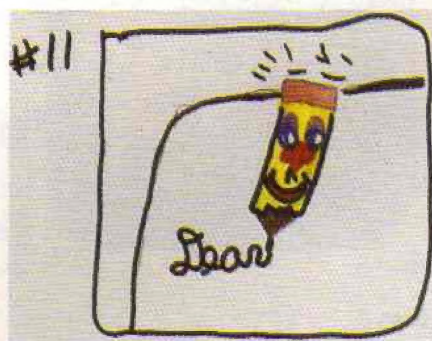
We've Been Framed

Here are a few frames from the winning entries of the Storyboard Contest (July/August 1988 issue).



LUNCH BOX JUMPS:

Jimmy Mowbray of Columbus, OH, sent us My Lunch-Box Is Alive.



Nathan Stohler of Anderson, IN, drew a storyboard titled Dear...



AFTER CROSSING A LARGE DESERT...

Emily Gersh of Silver Spring, MD, created Squawkie, The One-Colored Parrot.



Gabriella Scelta of Brooklyn, NY, sent us The Adventures of Frogman.

Dream On

Here are some of the dreams that our readers told us about in the "Life Is But A Dream Contest" (September 1988 issue). We hope that all of your dreams come true.

I want to run an earring shop on the moon.

Penny Gronbeck
Minneapolis, MN

I want to become a computer expert and take over Slipped Disk's job.

Cyndi Lux
San Antonio, TX

I want to be a famous aquarist and study new species of fish.

James Chien
Ridgewood, NY

My dream is to rent three buses so I can drive my aunts, uncles, and 41 cousins to Disneyland.

Alexa Doroshenk
Springfield, VA

I'd like to be the first female baseball player in the major leagues.

Sara Williams
Atkins, AR

SALES LEADERSHIP CLUB
SINCE 1958

PRIZES or CASH



SENIOR CHEMLAB SET
Sell only 22 Items



CONFETTI AM/FM DUAL CASSETTE STEREO
Sell only 64 Items



SWISS ARMY KNIFE
Sell only 11 Items



TASCO CAMOUFLAGE BINOCULARS
Sell only 11 Items

BRAND NAMES SUCH AS:
Wilson
AnSCO
MAGNAVOX
GE
MB
CASIO
RIVAL
tasco



BIKE/HIKE DAY PACK
Sell only 9 Items



2-MAN BOAT KIT
Sell only 30 Items



SNO-NUT
Sell only 13 Items



PRESTO HOT AIR POPCORN POPPER
Sell only 16 Items



G.E. CLOCK RADIO
Sell only 15 Items



G.E. STEREO CASSETTE PLAYER WITH HEADSET
Sell only 15 Items



ANSO 110 CAMERA OUTFIT
Sell only 12 Items



G.E. WALKIE-TALKIE SET
Sell only 15 Items



MAGNAVOX BLACK & WHITE AM/FM TV
Sell only 81 Items



POOL TABLE
Sell only 63 Items



THE CARROM GAME BOARD
Sell only 20 Items



STUDIO LINE SERIES PHONE
Sell only 25 Items



WESTCLOX ALARM CLOCK
Sell only 9 Items



ELECTRONIC SPEEDOMETER
Sell only 16 Items



SEA EXPLORER SKIN DIVING OUTFIT
Sell only 13 Items



BOYS 20" BMX
Sell only 92 Items



COOL CAM by Polaroid
Sell only 31 Items



PORTABLE COMPONENT MUSIC SYSTEM
Sell only 51 Items



AM/FM DIGITAL CLOCK RADIO WITH SOFTLITE
Sell only 25 Items



MOGUL MONSTER
Sell only 42 Items



TORPEDO RUN
Sell only 23 Items



G.E. STEPPIN-UP AM/FM CASSETTE PLAYER
Sell only 27 Items



40 x 40 TABLE TOP TELESCOPE
Sell only 21 Items



MASTER DETECTIVE SET
Sell only 21 Items



WIN, LOSE OR DRAW (Like TV Show)
Sell only 18 Items



CALCULATOR ALARM WATCH
Sell only 8 Items



JIM RICE HITTERS SET BY SPALDING
Sell only 20 Items



12" WHEEL SCOOTER
Sell only 54 Items



88-PC ART CENTER
Sell only 15 Items



TASCO MICROSCOPE KIT
Sell only 14 Items



2-MAN MOUNTAIN TENT
Sell only 21 Items



BADMINTON & VOLLEYBALL SET
Sell only 17 Items



MASTER DETECTIVE SET
Sell only 21 Items



WIN, LOSE OR DRAW (Like TV Show)
Sell only 18 Items



CALCULATOR ALARM WATCH
Sell only 8 Items



MOGUL MONSTER
Sell only 42 Items



12" WHEEL SCOOTER
Sell only 54 Items



88-PC ART CENTER
Sell only 15 Items



TASCO MICROSCOPE KIT
Sell only 14 Items



2-MAN MOUNTAIN TENT
Sell only 21 Items



BADMINTON & VOLLEYBALL SET
Sell only 17 Items

A Few of the Thousands of Successful Boys and Girls



Mrs. Wolfe writes, "Dale started selling your cards when he was 5, because my other kids were. He's been selling for 4 years earning great prizes."

Dale Wolfe
Blandburg, PA
Age: 9



"I loved selling your beautiful cards, stationery and gifts. I sold 32 items worth \$150.00. I got a great skateboard. Send me your next album and catalog."

Heather Winn
Boiling Springs, NC
Age: 11

Join today! Start earning big prizes or cash right away.

We'll send you a Free Sales Album displaying quality All Occasion Cards, Gift Wrap, Stationery, Recipe Book, Children's Coloring Cloth, Calendar Memo Cube, Address Book, Memo Board . . . and other gift items. Also included will be your Free Prize Catalog of many more prizes to choose from, and complete information on how to begin earning prizes and cash immediately.

Almost everyone will want to buy one or more items when you show them the Sales Album. You'll find it very easy to sell items required to get the prizes you choose, or take \$1.00 cash profit for each item sold.

**Nothing to pay. Nothing to return.
Nothing to lose. Everything to gain.**

CALL NOW
to get
Started!

Sorry . . .
operator cannot answer
questions. Only give
name, address, zip code.

*Free Phone Service good only in
the 48 Continental United States.

WRITE OR CALL TOLL FREE ANYTIME
1-800-325-5009*

Call Any Hour . . . 7 Days a Week

**Ask for
FREE SALES KIT 30,**

then give the operator your
name, address and zip code.

Sales Leadership Club

45 Warwick Street
Springfield, MA 01102



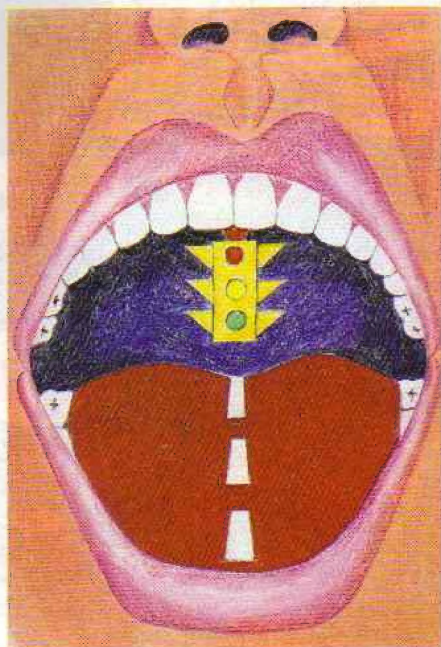


ILLUSTRATION BY CATHY COONEY

Red Light, Green Light

Some people worry about whether or not they have bad breath. Now, instead of asking a good friend, they can ask "Dr. Etiquette." ("Etiquette" is another word for manners.)

The \$135 gadget was created by a Japanese businessman who wanted to give people a way to check their own breath.

How does it work? The gadget uses a special gas sensor to measure the strength of an odor. You simply exhale for three seconds into the pocket-size breath detector.

If the green light goes on, your breath is fine. If you get a yellow light, it could mean trouble. If you get a red light, according to "Dr. Etiquette" you have bad breath.

But the invention is far from perfect. Just because an odor is strong, doesn't always mean it smells bad. So, if you've just eaten a mint, you might get a red light. After all, a mint has a strong odor.

Deep Sleep

Elephant seals have some strange habits. They dive deep into the ocean—sometimes up to 3,000 feet—and take a nap.

Burney Le Boeuf, a biology professor at the University of California, has been studying the seals for years.

He found that after weaning their young, the adult females go to sea for 2½ months. During that time, the seals are feeding furiously on squid, skate, rays and small sharks. The seals are under water almost 90% of the time.

They are so busy eating, that there is too little time for the seals to sleep. "They must have a different way of sleeping than any other mammal," Le Boeuf told CONTACT.

Le Boeuf thinks that the elephant seals take naps on the ocean bottom in between feeds. This might be possible, because elephant seals hold their breath when they sleep, both on land and at sea—for 25 minutes at a time. They use a lot less oxygen that way.

Sweet...glug...Dreams!

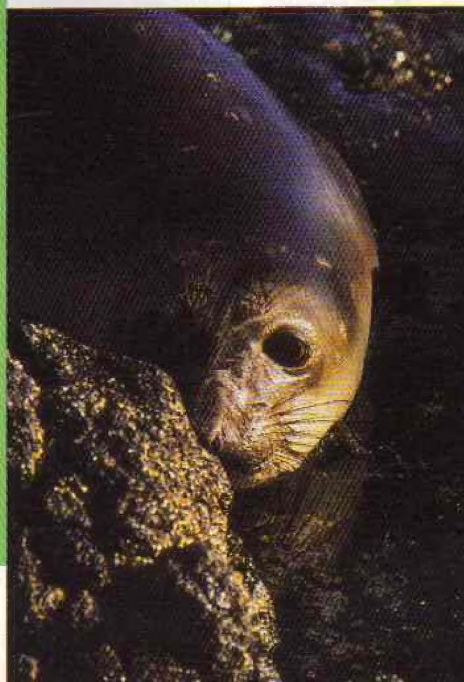


PHOTO © LEWIS TRUST/ANIMALS ANIMALS

Getting S'molar

It's been going on for 100,000 years. People's teeth are shrinking.

There's no need to panic. It's happening very, very slowly: Teeth are shrinking only 1% every 1,000 years. But today, people's teeth are only half as big as the teeth of the prehistoric Neanderthal man.

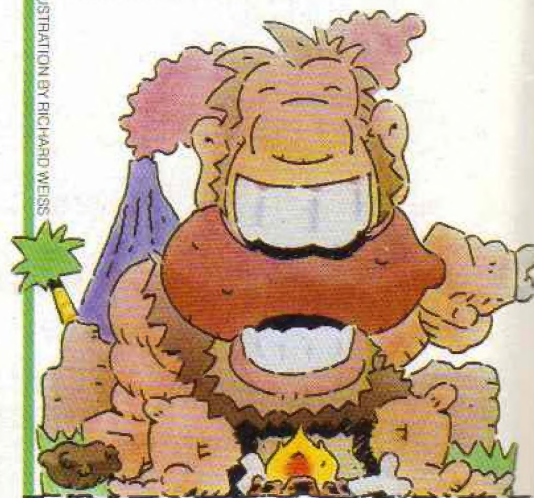


ILLUSTRATION BY RICHARD WEISS

Why? Dr. C. Loring Brace, a scientist at the University of Michigan, has compared ancient teeth with modern teeth. He thinks that teeth started getting smaller when people started cooking their food, instead of eating everything raw. That meant they didn't have to chew so hard. And people born with small teeth, who would not have been able to survive before cooked food, could now survive.

Superworm

Mention leeches to most people and they'll say, Yecchh! But thanks to Dr. Roy Sawyer, the slippery worms are turning into heroes.

Leeches live in the water. They attach themselves to fish or people, and bite them to get blood to eat. That may not sound good, but the leeches are helping doctors.

How? When someone loses a limb in an accident, doctors may be able to sew it back on. The problem is, they can reconnect the big veins, but not all the tiny ones. Blood flows into the limb but it can't flow out. The limb would be lost if it weren't for...leeches.

The doctors attach a leech to the limb and let it drink up all the extra blood. That keeps the limb healthy until the tiny veins have grown back.

"People have no sympathy for leeches," Dr. Sawyer told CONTACT, "because they aren't very cuddly."

As more and more people are helped by leeches, though, that idea could change. Having studied them all his life, Dr. Sawyer now runs a leech farm in Swansea, Wales. The farm raises thousands of leeches and ships them to hospitals all over the world.



PHOTO © STEPHEN DALTON/ANIMALS ANIMALS

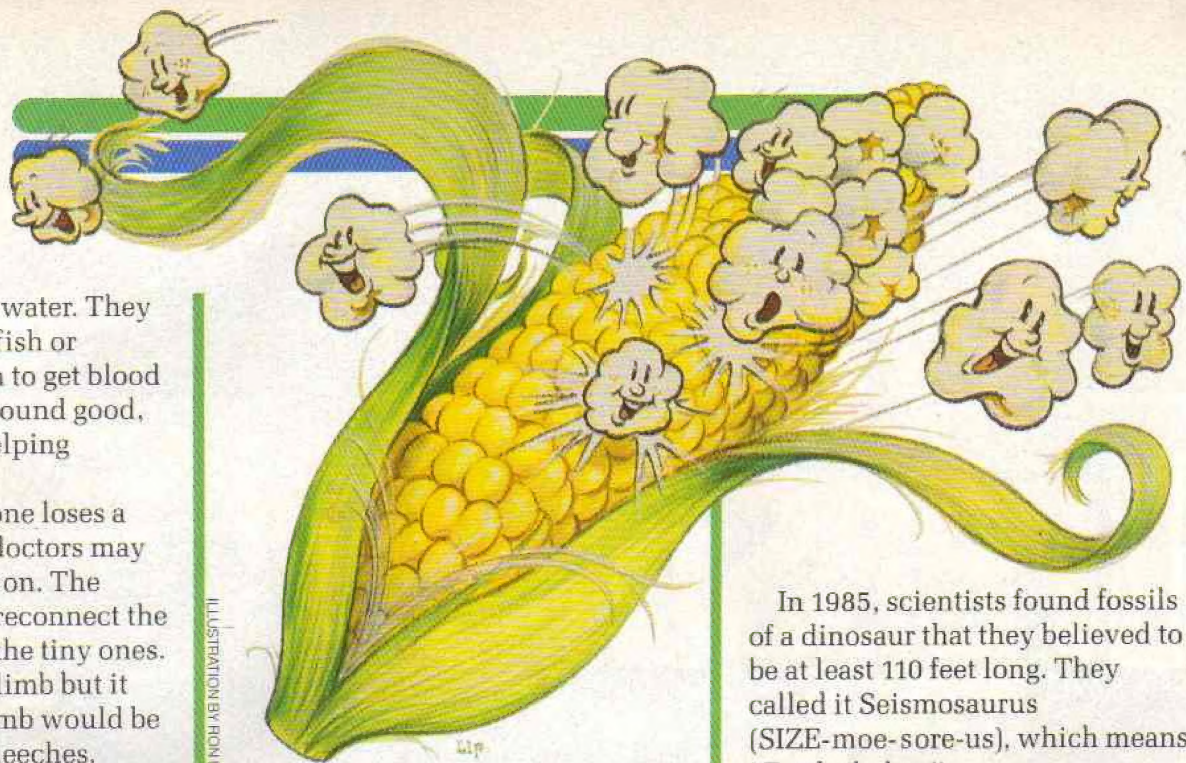


ILLUSTRATION BY HON LIPKING

Popped Cob

Wesley Friesen has finally answered the age-old question: Can you pop the corn while it's still on the cob? His answer: Yes!

"I was looking for a way to do something different with corn and popcorn," Wesley Friesen told CONTACT. "This just 'popped' into my head."

Friesen buys a special kind of corn—the kind that is good for popping in the microwave. He packages three cobs of corn, complete with three "popping bags." It looks the same as the fresh corn you might buy in the store. It's packed in green trays with plastic wrap over the top.

"People are surprised how much popcorn comes off one cob," Friesen told CONTACT. "You can get between one and two quarts per cob."

Big Bones

Two separate teams of scientists have uncovered fossils of gigantic dinosaurs. But which team has discovered the longest dinosaur ever known?

In 1985, scientists found fossils of a dinosaur that they believed to be at least 110 feet long. They called it *Seismosaurus* (SIZE-moe-sore-us), which means "Earth shaker."

This year, scientists at Brigham Young University in Utah discovered the bones of another giant dino. They believe it was at least 100 feet long.

But it's still too early to tell which dino will prove to be the longest.

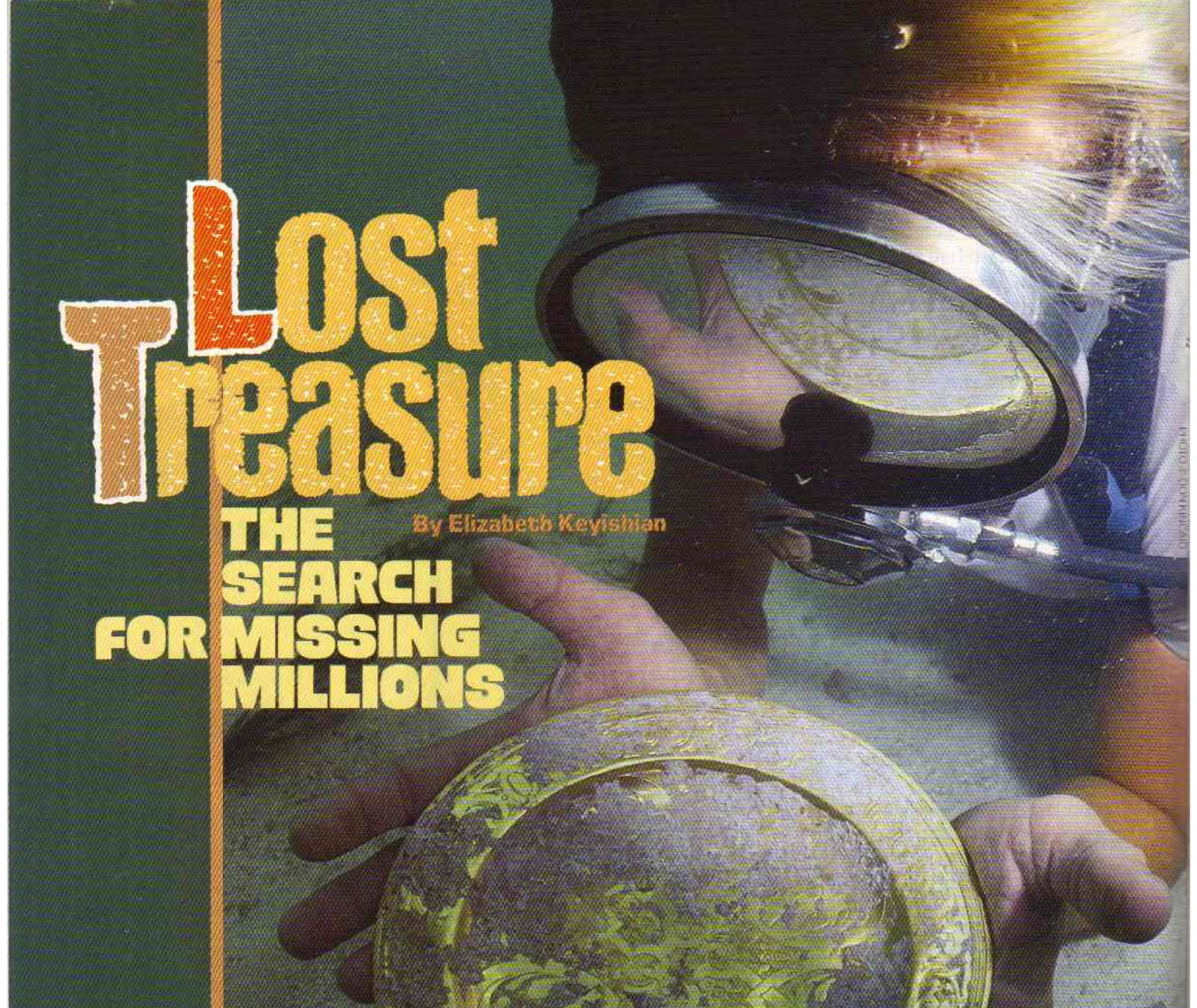


ILLUSTRATION BY JO LYNN ALCOHEN

So What's New?

You tell us and you'll get a nifty CONTACT T-shirt—if we print your story. Send us any science story from the news that you think our readers would like to know about. (Be sure to tell us your T-shirt size and where you heard the story.) Send to:

TNT 3-2-1 CONTACT Magazine
1 Lincoln Plaza
New York, NY 10023

A close-up photograph of a person's face wearing a diving mask and snorkel. The person is holding a large, ornate silver bowl or plate with both hands. The bowl has intricate designs and appears to be made of silver. The background is dark and out of focus.

Lost Treasure

THE SEARCH FOR MISSING MILLIONS

By Elizabeth Keyishian

- In Key West, Florida, a diver finds a mound of silver bars and coins nestled in the remains of a sunken ship's hull.

- In Oak Island, Nova Scotia, two men spend \$10 million hoping to find buried pirate's treasure that *might* be there.

This is a story about these two real-life treasure hunts. Chances are that after reading *Treasure Island* or seeing *Indiana Jones and the Temple of Doom*, you've daydreamed about finding some buried treasure yourself. But real-life treasure hunting is a lot different.

Treasure hunting takes a lot of patience, planning, very careful mapping and record-keeping—and money. Finding a treasure is like solving a mystery. You follow clues and piece together

evidence. Even then, you can hunt for treasure for years and years and still never find it.... But, then again, maybe you will!

A Shipwreck

In 1622, the *Nuestra Senora de Atocha* left Havana, Cuba, on its way home to Spain. The ship was loaded with gold and silver. But a hurricane hit the ship and hurled it toward the coast of Florida. There it hit a reef and sank.

In 1985, a treasure hunting-team led by Mel Fisher found the main hull of the *Atocha*. For 363 years it had been lying on the ocean floor off Key West, Florida. Mel's treasure could be worth up to \$400 million.

What does it feel like to find long-lost trea-

sure? "It's an eerie feeling to touch something no one has touched for 300 years," Taffi Fisher, Mel's daughter, told CONTACT. "It's real exciting. You immediately want to take the treasure to the surface and share it with everyone." Taffi has been a treasure hunter since she was 10.

Doing Your Homework

Mel Fisher's group did not just stumble upon the Atocha's treasure. It took 16 years of careful plotting, planning and teamwork.

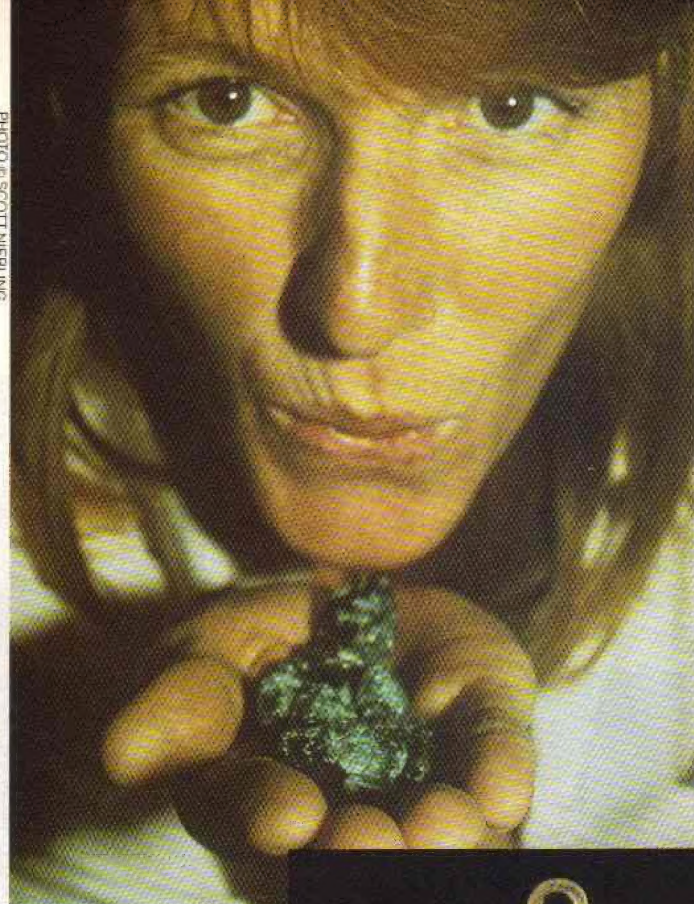
First, Fisher hired Eugene Lyons, an expert in studying old Spanish documents. The Spanish kept very careful records of their ships and what they carried. From these documents, Lyons figured out where the Atocha went down and how much treasure was on board.

Next, Fisher hired Fay Feild, an electronic engineer. Feild designed a special metal detector that could locate metal from far away. And, it could take readings twice as fast as other detectors.

Together, Feild and Mel Fisher created something they call a "mailbox." This elbow-shaped metal tube fit over the boat's propeller. It sent clear water from the surface down to the ocean's murky bottom. This helped divers see the bottom. It made it easier to find small pieces of treasure in the deeper layers of sand.

Fisher also hired a team of archeologists, map-makers and underwater photographers. They made maps of the ocean. They also kept detailed records of everything that was found: Every nail or piece of treasure was listed. ➡

PHOTO © SCOTT MIERLING



Above: Taffi Fisher shows off a handful of emeralds from the wreck of the Atocha.

Right: This solid gold and emerald cross might have been carried by a Spanish priest.

PHOTO © SCOTT MIERLING



Left: This 20-foot anchor was one of 5 or 6 carried by the Atocha. Anchors were used as brakes and to turn the huge boats around.

PHOTO © DON KINCAID



Taffi Fisher keeps track of everything that comes in. "First, it has to be drawn before it's cleaned," explained Taffi. "Then it gets a tag saying exactly where it came from."

"Each piece of the wreck site is like a word," archeologist Jim Sinclair told CONTACT. "You put together the words and they tell the story of what happened in the final moments of the *Atocha*."

The Oak Island Mystery

Treasure hunters like Mel Fisher, who look for the treasure of sunken ships, are lucky in one way. They know that there is treasure down there. The hard part, of course, is finding it.



PHOTOS © DON KIRKLAND

Above: Gold chains were not just for wearing. Links of the chain were bent off and used as money.

Right: Two archeologists use the red and white grid to map the position of the "ballast stones." These stones were carried in the hull of the ship to weigh it down.

But there are treasure hunters who look for treasure that they think *might* be there. Sometimes they have a few clues to go on. Or maybe they once heard a story of buried pirate treasure. Dan Blankenship and David Tobias heard the following story:

In 1875, a teenager named Daniel McGinnis decided to do a little exploring. He rowed his boat over to nearby Oak Island in Nova Scotia, Canada. There, he spotted an old oak tree with a sawed-off limb. The tree was standing in a clearing.

According to the story, the tree limb had rope burns on it. Daniel must have imagined some heavy treasure chest had been lowered into the ground. Underneath the limb, the ground dipped. Daniel was sure he had stumbled on buried treasure.

The next day, he returned with two friends. They began digging. They uncovered an old shaft, filled with sand and gravel. There were pickaxe marks on the walls. The boys hit wooden platforms every 10 feet. But they saw no end in sight. Whatever was buried was too far down for them to reach.

Eight years later, the young men returned. This time they brought a rich man with them. He hired more workers. The treasure-seekers turned up more clues as they dug deeper: A layer of coconut fiber, which could not have come from the island. And a stone with mysterious figures



carved on it.

At 98 feet, the hunters struck something hard. They were sure it was a treasure chest. But overnight, the shaft filled with 60 feet of sea water. That meant that besides the shaft, someone had dug side tunnels. They were built as booby traps—

so no one could get to the treasure.

Since then, there have been other attempts to get to the treasure. And more clues have turned up to keep the hunters interested. In 1897, a drill carried up a piece of parchment from the 155-foot level. It had two letters printed on it.


Treasure hunters decided that there must be a huge treasure down there. After all, someone had gone to a lot of trouble to make sure the treasure wouldn't be found!

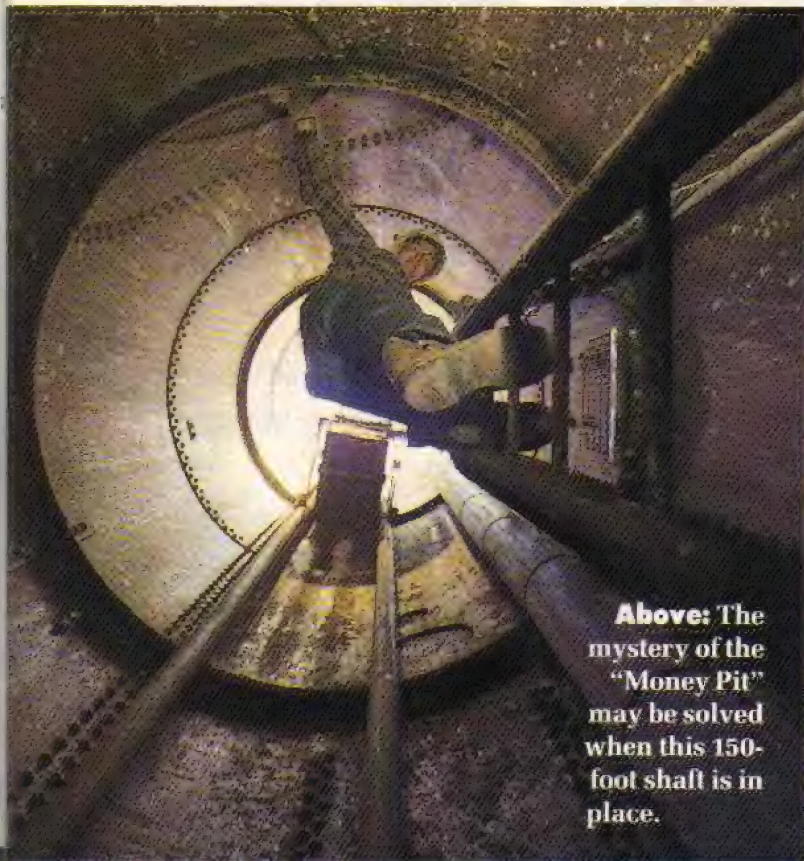
Why hasn't anybody been able to get to the Oak Island treasure? The problem was caused by the diggers themselves. Nobody thought that it was important to be careful.

Nobody kept records of where they dug and what they found. They may have thrown away important clues. So many holes were dug to get to the treasure, nobody is even sure which is the original hole!

One Last Try

Dan Blankenship and David Tobias have decided to launch a major attack on the Oak Island Pit. They are willing to spend \$10 million to find the treasure. The men plan to build an enormous shaft. This shaft will be built around the original pit.

Will Tobias and Blankenship find several billion dollars worth of treasure down there? Or is there nothing more than an empty shaft? Only time, money and careful digging will tell! 



Above: The mystery of the "Money Pit" may be solved when this 150-foot shaft is in place.

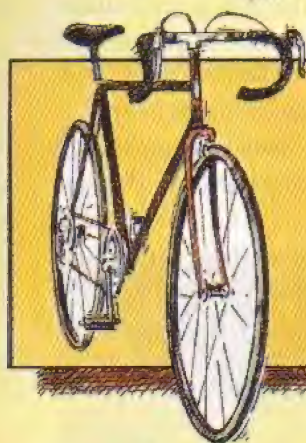
PHOTOS © OAK ISLAND ANTIQUARIAN

Right: Aerial view of Oak Island and the Money Pit.

Below: This message, written on a stone, has been translated this way: "Forty feet below, two million pounds are buried."



MIKE'S MYSTERY



FIND OUT WHERE MIKE WENT AND WIN A MONGOOSE BICYCLE!

Answer the 4 questions at the end of the story and you could win a new Mongoose bicycle with all the Bikextras accessories shown here. 2 second place winners will receive the Bikextras accessories shown here. Good luck!

The moment he saw it, Mike knew it was a magical bike. It was loaded with special bicycle accessories — there was even a _____ that fit him perfectly! He got on and started pedaling.



He hardly had to pedal _____ at all and the bike would go really far so Mike kept his hands firmly on the _____.

Soon he was out of his neighborhood and moving along a nice quiet road. "This is fun", he thought, "I wonder where I'm headed!" He took a quick sip from his _____.

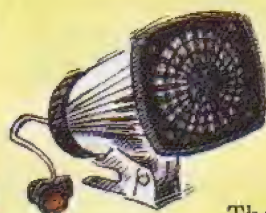
then came around a corner and suddenly there was Mt. Rushmore.

"Wow! I've only been riding 15

minutes and I've already traveled 300 miles. I must be speeding like crazy." Mike checked his _____.



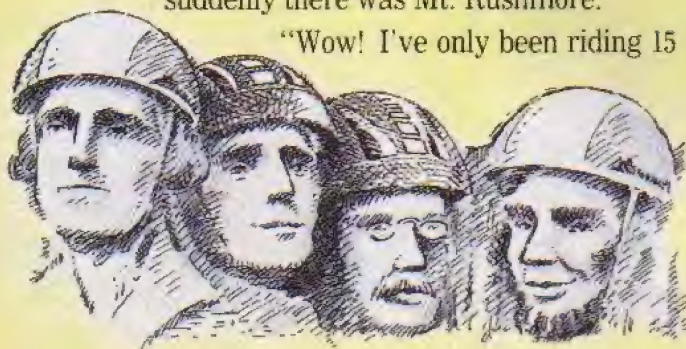
He was only going 10 mph. "I knew it was a magic bike!" he said and rode on happily. After Mt. Rushmore, Mike rode 380 miles to Denver.



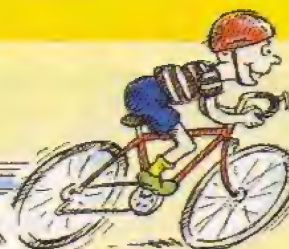
There was a lot of traffic in Nebraska and Mike had to use his _____ several times. Once there, Mike decided to ride another 800 miles to Dallas, the biggest city in America's second biggest state for ice cream. He had been there before and he knew the ice cream was great. But as soon as he got there, the bike picked up speed.

Faster and faster it went, heading towards the biggest city in the Sunshine State where, after 1,309 miles, it

just as suddenly stopped. Mike dived over the handlebar _____ and went — splash!!!!



RIDE



he joked, "you're all out of breath." He walked the bike up to the ice cream stand and enjoyed a chocolate cone with sprinkles.

in the Atlantic Ocean. "That was fun. Can we do it again?" But then Mike saw that the front tire was flat. "No wonder we stopped so fast,"

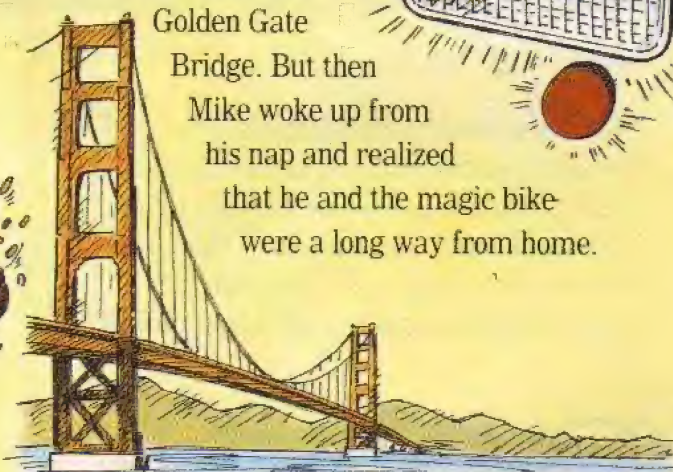
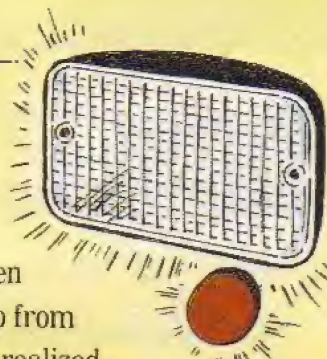


Then he took his _____ and reinflated the tire. "I could use a rest too my friend!" Mike told the bike. "Why don't we find a nice shady palm tree and have a nap?" They rode 10 miles until Mike found the perfect spot. Then he leaned the bike against the tree, secured it with his _____ and quickly fell asleep. Mike dreamed they were up riding

again. They headed north 1,105 miles to the capital and went by the

President's house. He happened to be looking out the window and waved hello. That really got Mike excited and before he knew it he had ridden 229 miles to the Empire State Building. It started to get dark, so Mike

turned on his _____ He rode another 3,025 miles back across the country to the Golden Gate Bridge. But then Mike woke up from his nap and realized that he and the magic bike were a long way from home.



ANSWER THESE QUESTIONS AND WIN A MONGOOSE BICYCLE!

1. At the end of the story where are Mike and his bike? (city and state) Be very careful!
2. How far did Mike and his bike travel? (in miles)
3. What are the names of the Bikextras' products in the story?
4. What landmarks and cities did Mike see or dream about on his trip?

If you know the answers to these questions, write them down along with the name of this magazine, your name, street address, city, state and zip code and mail them to: Mike's Mystery Ride, Roosevelt Field Station, P.O. Box 4019, Garden City, NY 11530

You could win a Mongoose bicycle complete with Bikextras accessories or all the Bikextras accessories shown here.

No purchase necessary. Entries must be received by May 31, 1989. Winners will be selected by random drawings conducted by Christopher Thomas Associates, Inc., an independent judging organization whose decisions are final. Drawing will take place on or about June 19, 1989. Winners will be notified by mail and may be required to complete and return an affidavit of eligibility and release within 15 days of date of notification so alternate winners may be selected. Odds of winning dependent on total number of entries. All prizes will be awarded. Limit one prize per household. No substitution for prizes. Prizes are not transferable. Taxes are the sole responsibility of winners. Sweepstakes open to residents of the U.S. except employees and families of American Recreation Group, their affiliated companies, brokers, distributors and agencies and employees and families of Christopher Thomas Associates. For a list of winners, send a self-addressed, stamped envelope to Mike's Mystery Ride, Roosevelt Field Station, P.O. Box 4019, Garden City, NY 11530. Void where prohibited by law.



BIKEXTRAS™

Wanted!

SIX OF THE WORLD'S MISSING TREASURES

by Wendy Williams

Here are some stories about lost treasures still waiting to be found. At least, that's what some people think. No one knows for sure whether these treasures really exist. But isn't it great to dream about all those riches?

The Sunken Steamer

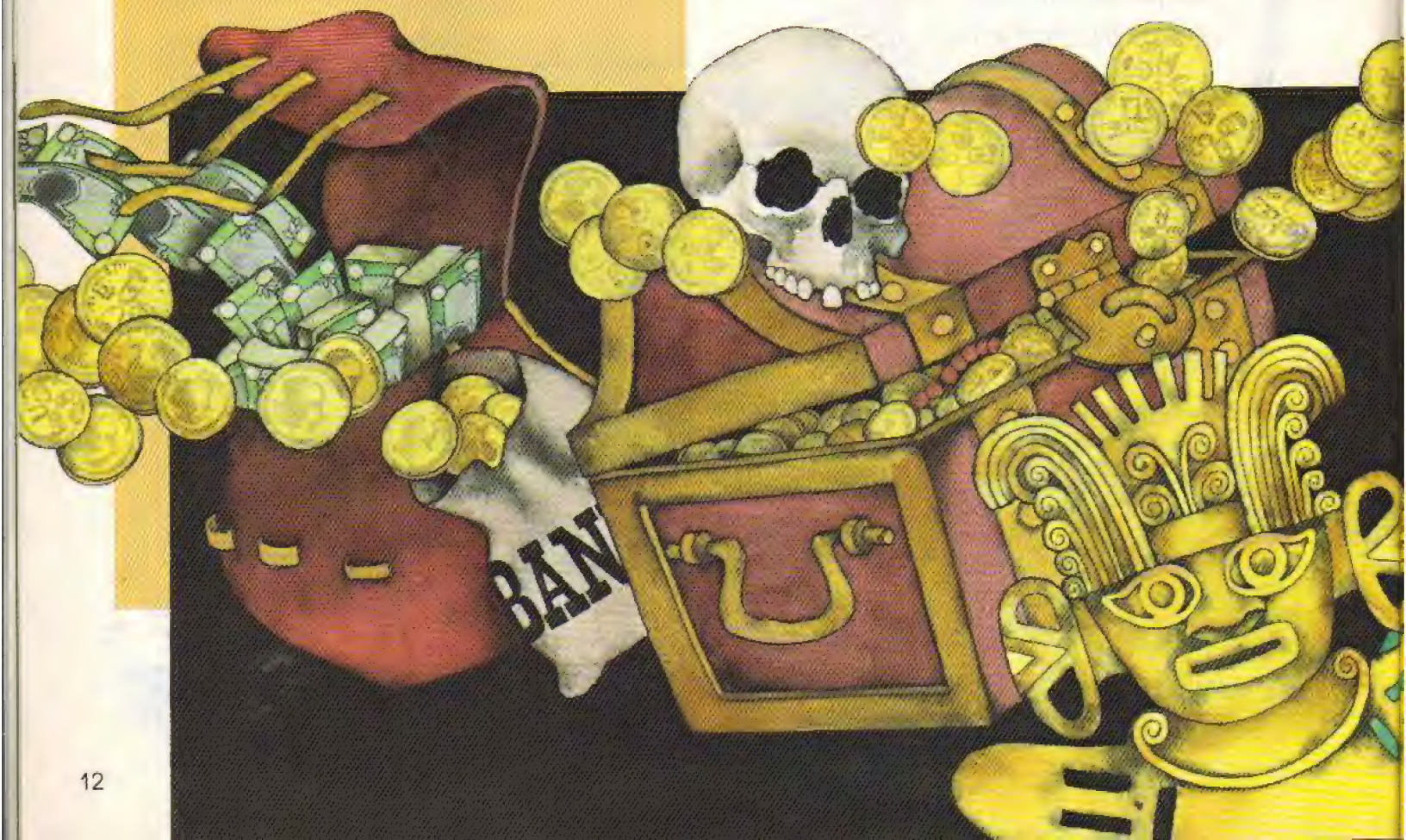
Who knows what happened to the *Dean Richmond*? The steamer was on its way to Buffalo, NY, from Toledo, OH, when it sank in a storm off Van Buren Point, NY. The date was October 14, 1893.

Witnesses told officials that they had seen two wooden boxes loaded onto the ship before it sailed. The witnesses said the boxes contained \$250,000 in gold coins. Today those coins would be worth millions.

The Lost Dutchman's Mine

"I know a place where gold nuggets are as big as acorns," a man once said. He was talking about the Lost Dutchman's Mine. Some people think it lies in the Superstition Mountains of Arizona.

The mine has been lost and found many times. It was first located in the 1840's by a group of miners. The miners were killed by Apache Indians. Then a prospector found the mine. He drew a map for a friend before he died. That friend was never heard from again. And the Lost Dutchman's Mine remains lost!



Lake of Gold

Imagine a lake full of gold. There may be such a place in Colombia, South America. During the 1600's, Incan Indians crowned their new chiefs at the lake. Each chief was powdered from head to toe with ground gold. Emeralds and other jewels were heaped at his feet.

To please the gods, the chief jumped into the lake. And he threw his glittering fortune into the water, too. Now, some folks say that if the treasure is really there, it is worth *billions* of dollars.

City in the Sea

Port Royal, Jamaica, was the home of many pirates. They had little respect for the law. But the town put up with them because the outlaws brought ashore large amounts of gold and silver. The pirates spent most of this money at local taverns. So everyone got rich.

But on June 6, 1642, that all changed. A terrible earthquake struck, taking Port Royal and its fortune into the sea. Scuba divers off the coast of Jamaica are still looking for the pirates' booty.


Hills of Gold

There may be a treasure buried in the hills of Dalton, MA. How did it get there? During the American Revolution, the British hired soldiers from Hesse, in Germany, to help fight the colonists. When the British were defeated, the Hessians ran away—carrying lots of valuables.

Angry colonists battled the Hessians at Dalton. Some say the Hessians had already buried their treasure. So the residents of Dalton may be sitting on gold!

Hide 'Em, Cowboy

What do a brass kettle, a silver watch and a secret code have to do with buried treasure? Plenty! They are all clues left behind by the American outlaw, Jesse James.

In 1876, Jesse and his gang ambushed a group of guards in Mexico. The guards were carrying bars of gold. Some people think Jesse buried the gold in the Wichita Mountains of Oklahoma. He may have also buried money he'd gotten from robbing trains. Treasure hunters have been looking for the loot ever since! 

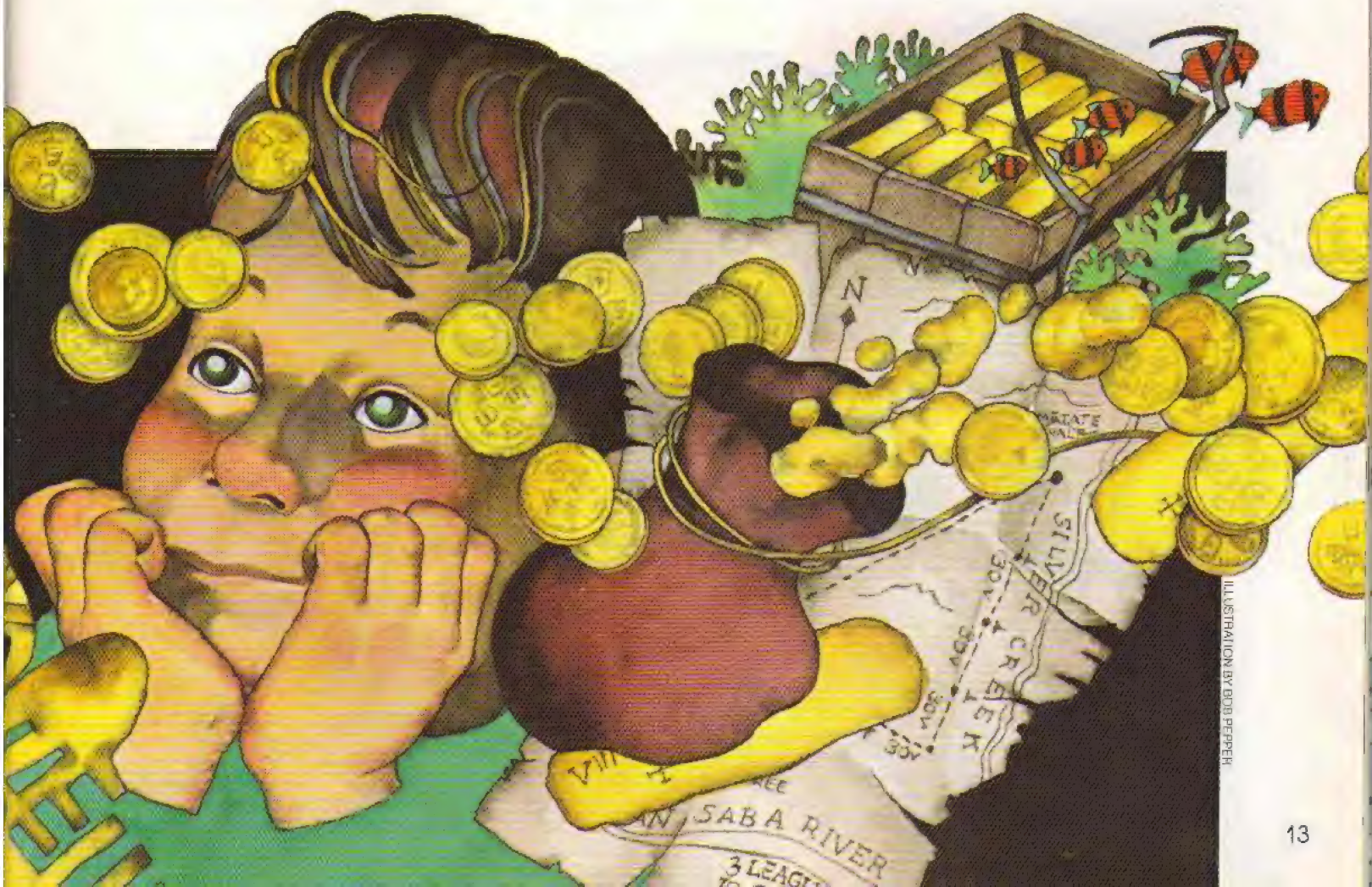


ILLUSTRATION BY BOB PEPPER

Break This TREASURE Code!

What if your only clues to finding a \$20 million treasure of gold, silver and jewels were three pieces of paper? There are no letters or words on the papers...just 1,901 numbers!

In 1822, a man named Thomas Jefferson Beale gave a small metal box to an innkeeper, Robert Morriss. The box contained a coded message describing the location of Beale's treasure. Beale did not give Morriss the "key," or answer, to the code. He said that in 10 years, another person would mail the solution.

But Morriss never received the solution. Over the years, many people have tried to crack the three-page code. So far, only one page has been figured out.

We've included part of the cracked code below. BUT, we scrambled it around. So, now you have to CRACK THE CODE!

Hint: To find the beginning, start at the end. And separate the letters into words. Answer on the Did It! page.

TIGNIDNIFNIDAHEBLLIW
YTLUCIFFIDONTAHTOSELOHEHTFO
NOITACOLTCAxEEHTSEBIRCSEENO
REBMUNREPAP...REVLISFOSDNUOP
EVLEWTDNADERDNUHTHGIEYTRIHT
DNADLOGFOSDNUOPNEETRUOFD
DERDNUHNETDNUORGEHTFOECAFRUS
EHTWOLEBTEEFXISELOHANIDROFDEB
FOYTNUOCEHTNIDETISOPEDVAHI



ILLUSTRATION BY BOB PEPPER

ADVERTISEMENT

CREATE YOUR OWN ADVENTURE WITH THIS SUNKIST® FUN FRUITS® REAL FRUIT SNACKS

R L I B

Ask your friends for words to fill in the blank spaces.
But don't let them see what you are writing until you're
finished. Then read your story to them out loud.

Yesterday, I went for a walk through the Fun Fruits
Forest. I wanted to visit _____, who lives in a
_____ near there. I brought some Fun Fruits
with me, just in case I wanted to have a snack on the way.

When I passed a _____,
I decided to stop and _____ for a while. But
while I was sitting there, a _____ jumped
out from behind a _____ and started to
_____ at me. Then I remembered that I had
brought my _____. I gave some to the
_____. They were shaped like _____
and they tasted like _____. The
_____ liked them so much that it started to
_____. I picked up my _____
and ran off.

My friends all thought that I was _____,
but I got to _____ before it was time to
_____.

AND SO
IS FUN
FRUITS
NEWEST
FLAVOR:
STRAW-
BERRY
BANANA.

LOOKS
LIKE
FUN!

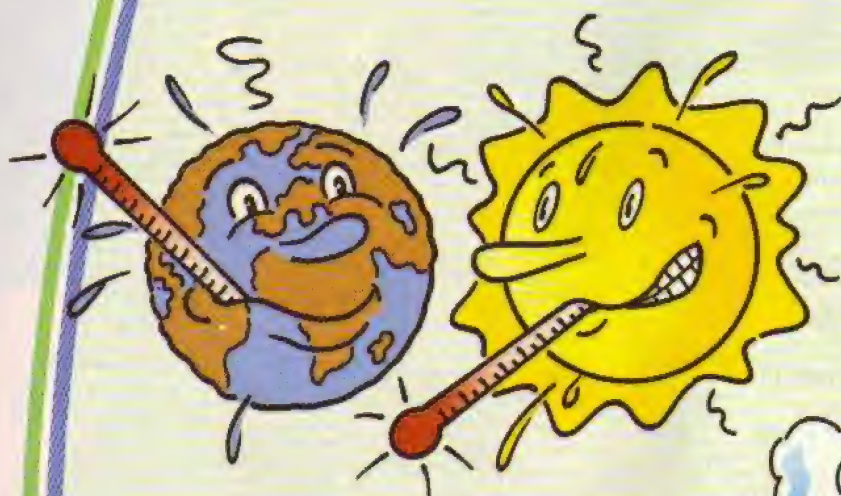
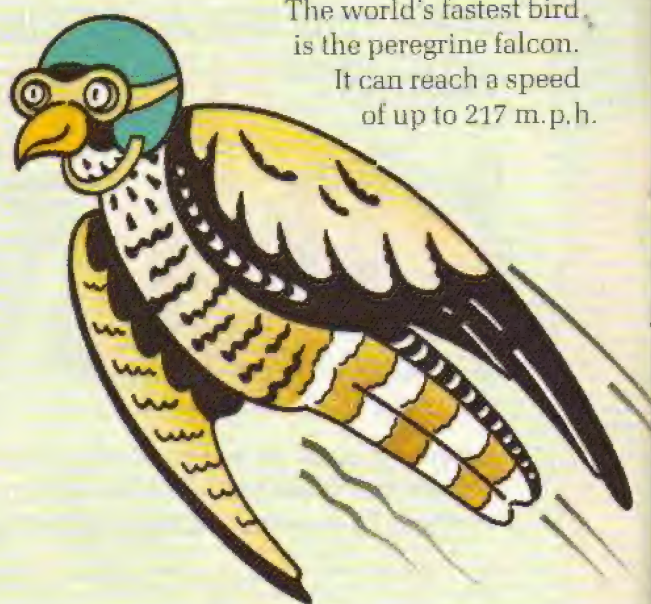
TAKE SUNKIST® FUN FRUITS®
ON YOUR NEXT ADVENTURE.



Sunkist® and Fun Fruits® are registered
trademarks of Sunkist Growers,
Redwood City, CA, USA.

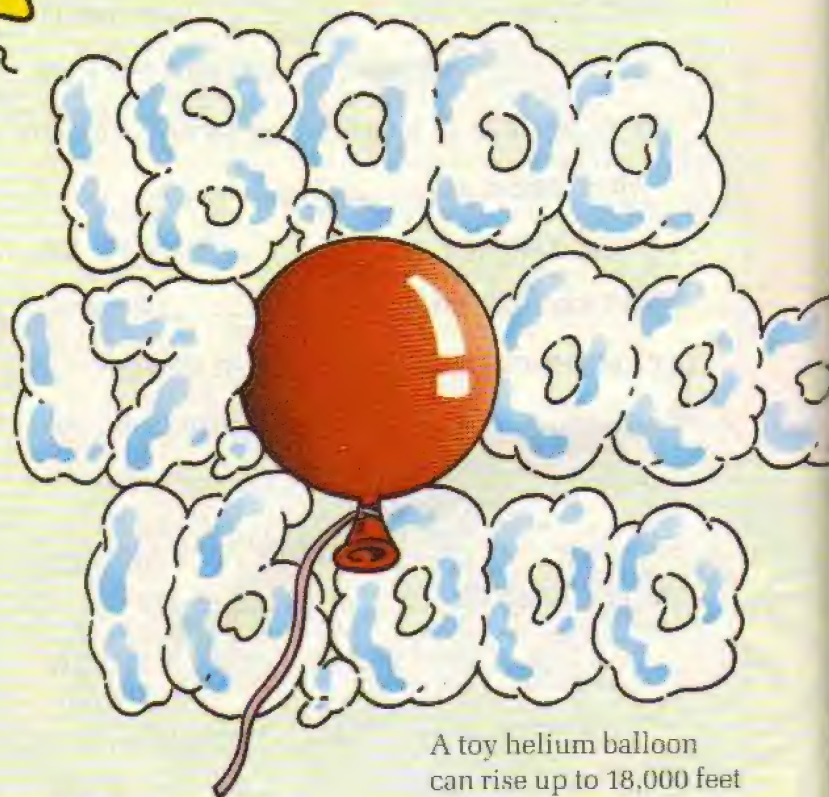
Factoids

The world's fastest bird,
is the peregrine falcon.
It can reach a speed
of up to 217 m.p.h.



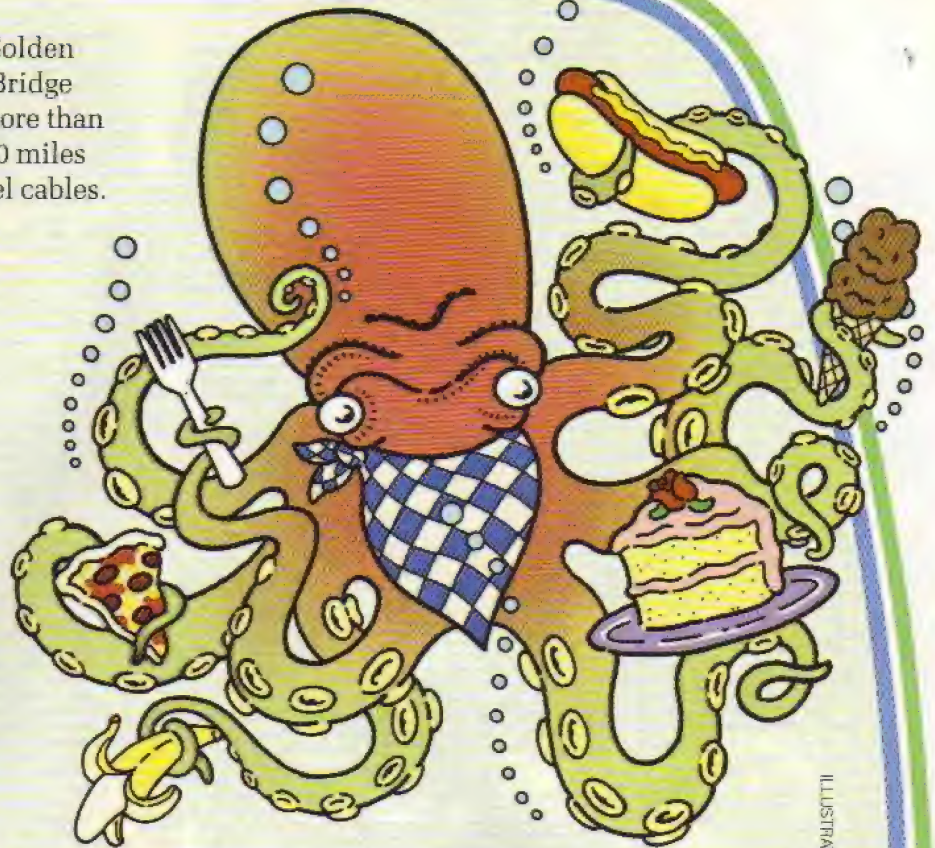
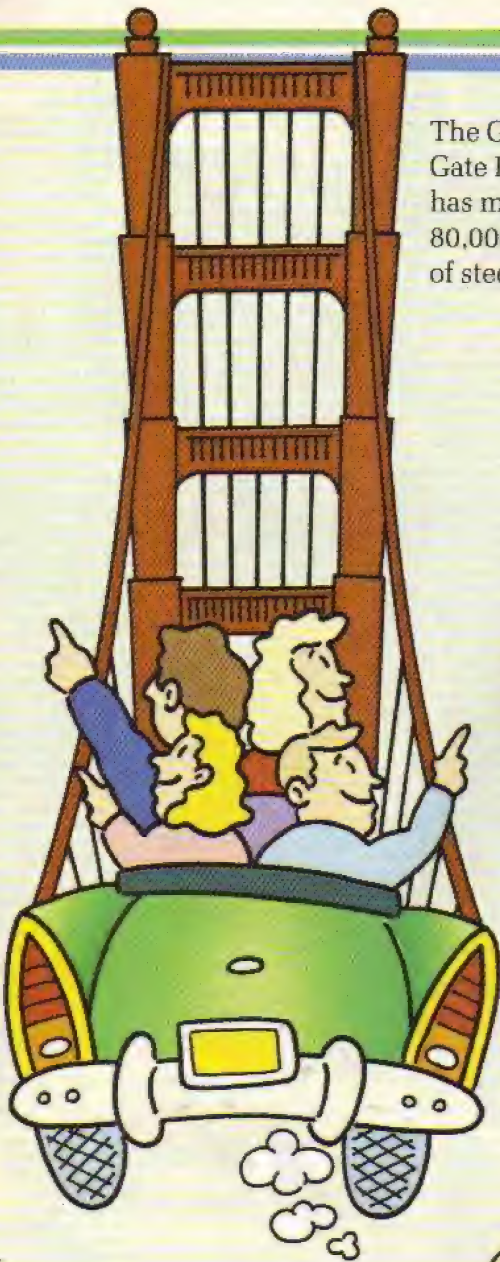
The center of the Earth could be
hotter than the surface of the sun.

The world record
for skipping a stone
on water is
29 skips in a row.



A toy helium balloon
can rise up to 18,000 feet
before breaking.

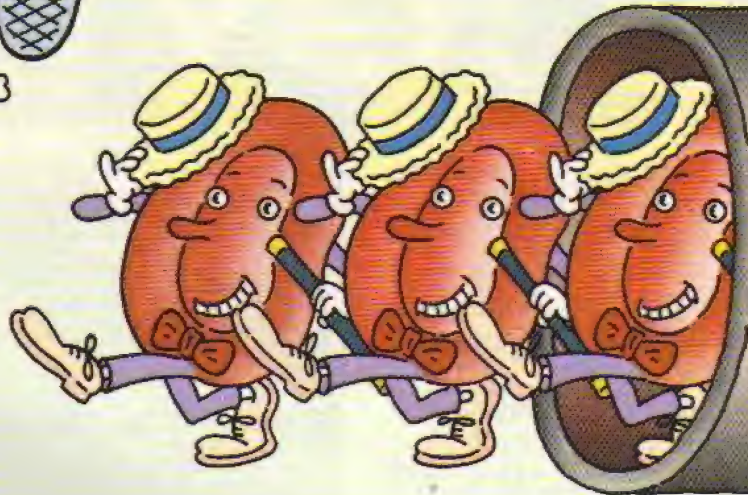
The Golden Gate Bridge has more than 80,000 miles of steel cables.



Many types of octopi will turn bright red when they see food.

ILLUSTRATIONS BY DICK DANIEL'S

Your body makes more than one and a half million new blood cells every second.





Science Saves the Day on

by Renee Skelton

MACGYVER

You're sitting down to watch a TV show. There's lots of action, but it looks like the hero is in big trouble. He's being chased by a gang of criminals. They have guns. He doesn't. The hero is trapped. He looks around desperately for a weapon. And there it is on the floor. As the bad guys close in, he quickly grabs his trusty ammonia and hydrochloric acid!

The hero mixes the chemicals to make a swirling white cloud. In the confusion, he makes a spectacular getaway. If this happens on the tube, you're probably watching *MacGyver*, the ABC-TV series in which science always saves the day.

MacGyver is a clever character who has lots of science know-how. He uses his brains to rescue people in trouble, solve problems and get the best of the bad guys.

When MacGyver is in a jam, he doesn't punch his way out with his fists. He doesn't blast his way out with a gun. He thinks his way out. As Richard Dean Anderson, the actor who plays MacGyver, says, "MacGyver uses brain cells not brawn cells."

Science to the Rescue

If you watch *MacGyver*, you get the feeling there's nothing he can't fix. There's no tight squeeze he can't slip out of. And whether he's hiking in the forest, or locked in a dungeon, all he uses are the everyday items around him.

On one show, MacGyver plugged up a sulfuric acid leak with chocolate bars. (The sugar forms a gooey paste when it reacts with acid.) In another episode, he uses metal shavings from a bicycle fender to make a torch. (Most powdered metals

will burn.) He used the torch to cut through a thick door. He even brought an old battery to life by filling it with wine. (Car batteries use stronger acids, but even wine or vinegar will carry a charge.)

All the neat science tricks, called "MacGyverisms," are there for a reason. Steve Downing is executive producer of the show. He says entertainment is the main goal. But there is a strong message mixed in with the fun. Sure there are fights, exploding bombs, and guns. But the show points out that there are smarter ways to solve problems.

"When MacGyver is in trouble, instead of doing a car chase or a shoot-out, we try to find some non-violent way out," says Downing. "We have him look around and think, 'What can I use here?'"

For example, in one show, MacGyver was kidnapped by a crooked sheriff. He and a friend were forced to go down into a mine. In other shows, the hero would probably tackle a guard and take the gun. Then he would have shot his



Right: MacGyver lands at the scene of his next big adventure. **Below:** A robbery takes place while MacGyver is shopping. Our hero picks up some household items which he'll use to make a stinging tear gas. The crook is coming up from behind to get a big surprise!



way out. Not MacGyver. He started to think.

MacGyver got an idea from the mining helmets he and others were wearing. The helmets had lights. MacGyver knew the lights worked by burning calcium carbide. MacGyver gathered some of the helmets in an empty part of the mine. He removed the carbide. Then he dropped the pieces into water. The water started to bubble. It was letting off explosive gases like hydrogen and oxygen. He just needed a spark, and—boom! No one was hurt. But in the confusion, he and his friend escaped.

A Real MacGyver

The show depends a lot on MacGyver's use of science. But the writers aren't scientists. They first try to write good stories. Then they turn to science to get the hero out of trouble. Sometimes they come up with a solution themselves. But most of the time, John Koivula gets a call.

Koivula is the show's science advisor. He's a gemologist—a scientist who studies the structure of gems. To do that, he has to know lots of chemistry and physics.

"The writers will call up and say, 'MacGyver's in a basement,'" Koivula explains. "There are ➡

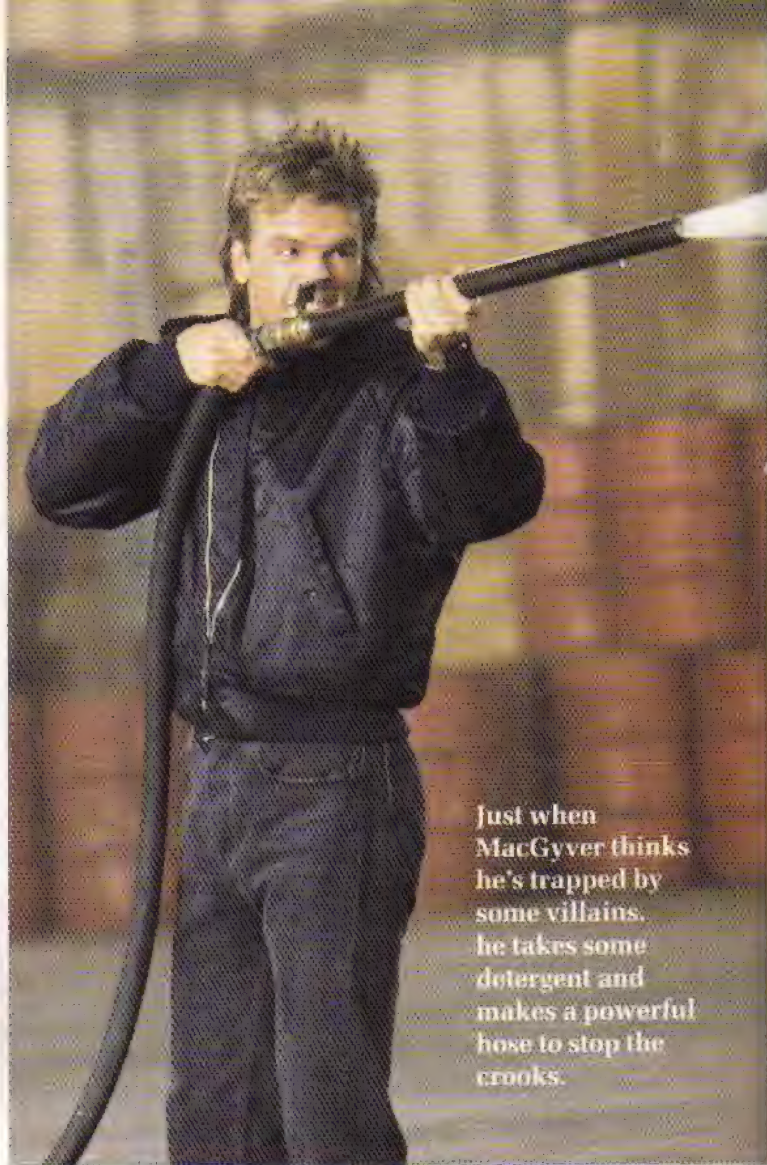
no doors, no windows. How do we get him out?"

Usually, Koivula comes up with a scientific solution right away. Sometimes he'll have to think about it. But he hasn't been stumped yet. One reason is that he's sort of the real-life MacGyver. He doesn't go around rescuing people. But, like MacGyver, he always carries his Swiss Army Knife. Koivula is a science wiz. He doesn't like guns. And he's always coming up with neat little science fixes for his own problems.

"Richard Dean Anderson does these things on screen. I do them off screen," Koivula told CONTACT.

Of course the people who put the show together have to be very careful. Anderson says if MacGyver is making something dangerous or explosive, one ingredient will be left out in the TV formula. "So the kids don't blow up the kitchen," the star explains.

And sometimes other events get exaggerated. "In the first show, I stopped an acid leak with a couple of candy bars. Well, there really is a compound in chocolate (sugar) that would stop sulfuric acid. But it would take about 40 pounds of chocolate to do it," Anderson says. "I had a couple of Hershey Bars on me. But the correct theory is there!"



Just when MacGyver thinks he's trapped by some villains, he takes some detergent and makes a powerful hose to stop the crooks.

A special suit protects MacGyver from a mysterious disease which has killed a lot of animals. He's holding a homemade antenna to keep in touch with the outside world.



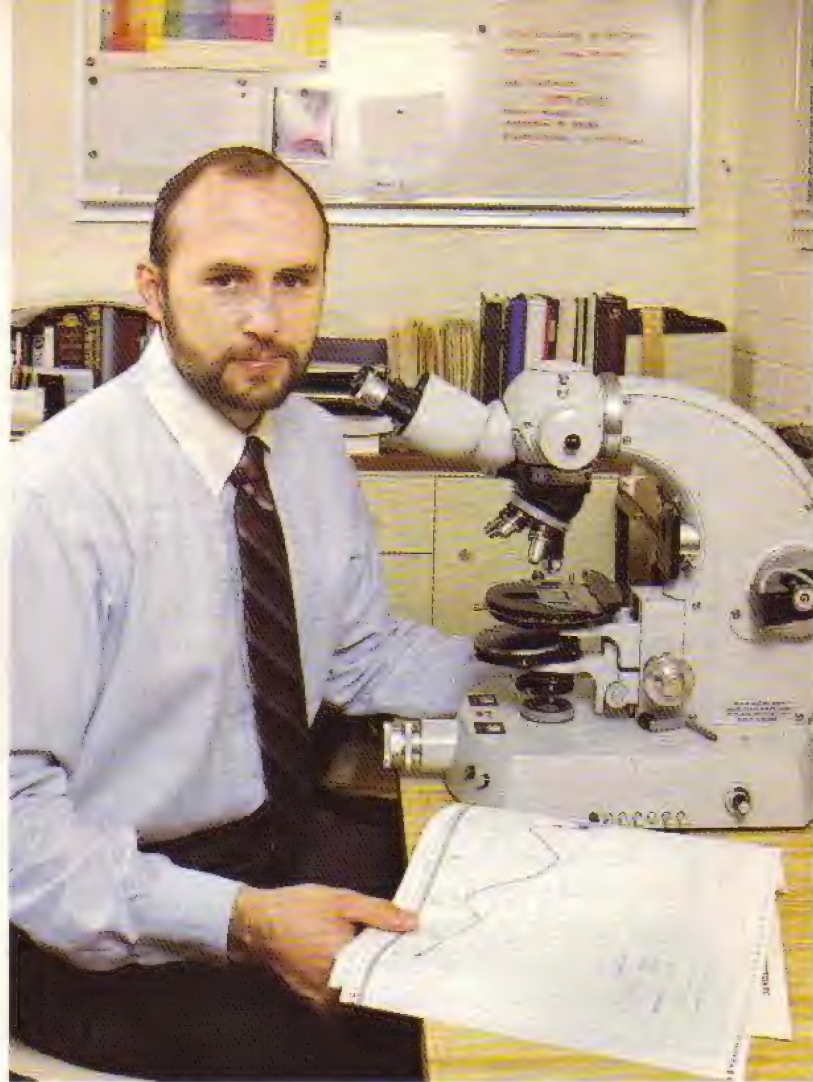
The Perfect Man for the Job

Can Anderson fix acid leaks with candy bars in real life? Not exactly. In fact, Anderson admits that he's not a science genius. Growing up, his house was filled with art, music and books. He didn't think much about science. But now he says, "I'm fascinated by science."

Even though he's not a science wiz, Anderson and the character he plays do have some things in common. Anderson loves sports. And like MacGyver, he plays hockey whenever he can. He's got MacGyver's love of adventure. In fact, when he was 17, he rode his bike 6,000 miles across Canada.

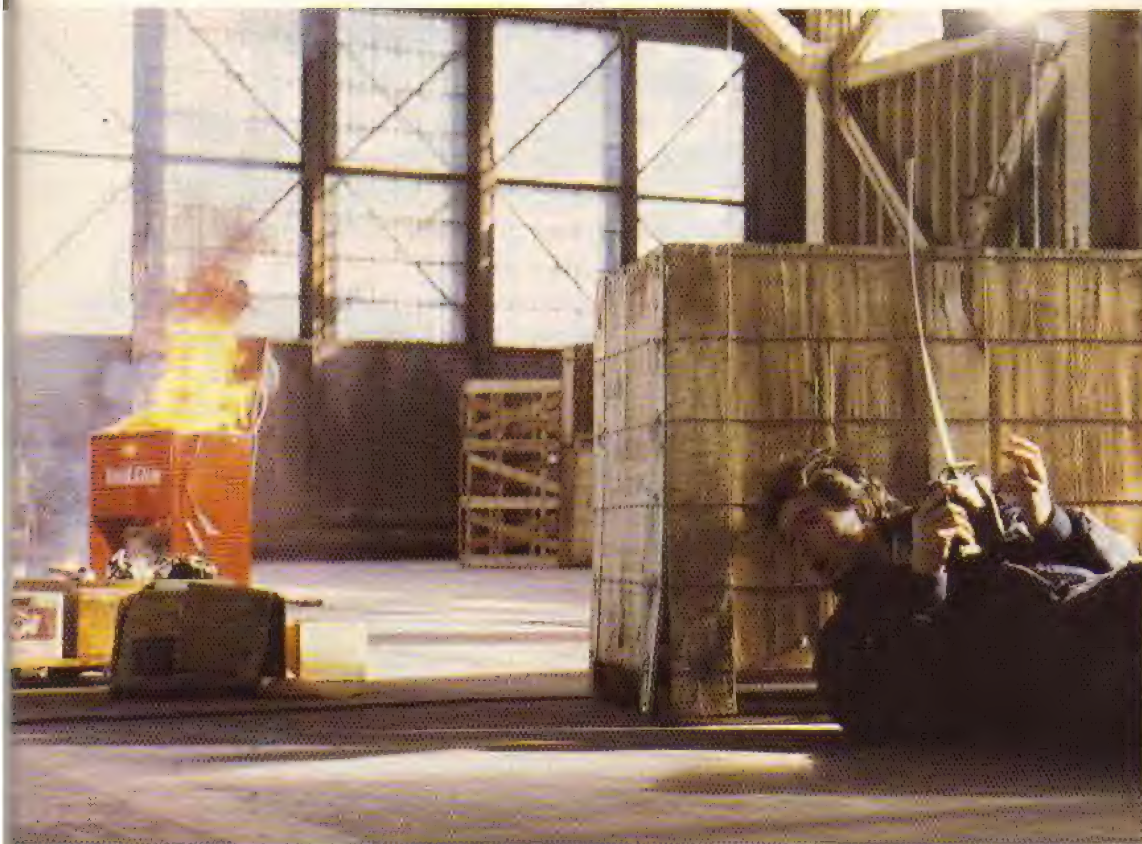
Richard Dean Anderson thinks a lot like MacGyver, too. "I'm not a big fan of guns," he says. And that also goes for violence. In college biology, he didn't even like the idea of cutting up a dead frog.

That's why it's not surprising that one of the things he likes most about the show is the message it gives. *Thinking your way out of a situation is better than fighting your way out.* It seems that a lot of MacGyver's fans think that's a real neat message, too. **620**



Above: The "real" MacGyver is John Koivula. He gives the science ideas to the writers of the show.

Below: A quickly built remote control device is used to blow up a bomb without harming anyone.



PHOTOS © PARAMOUNT PICTURES CORP.

Any Questions?

By Lisa de Mauro

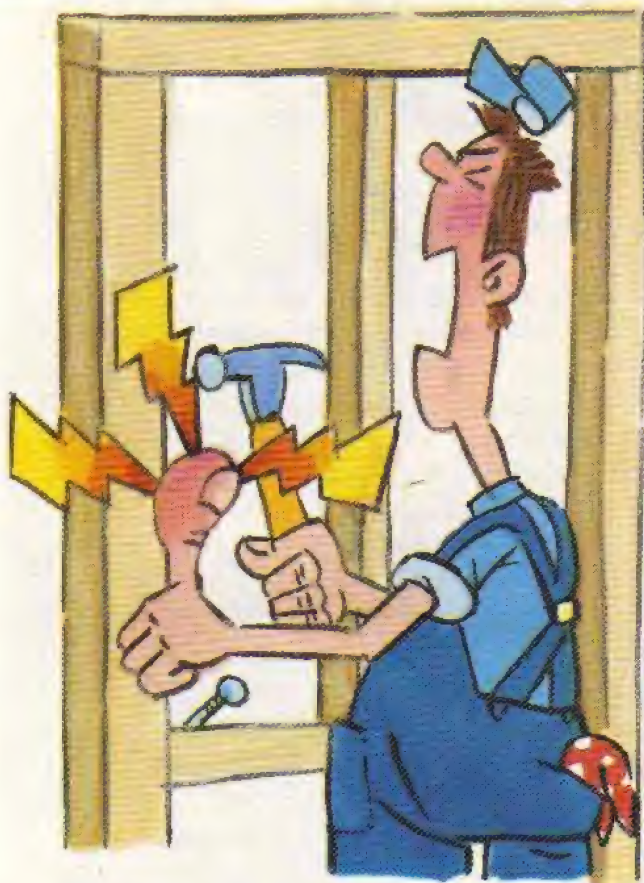
Why do you get white spots on your fingernails?

If you've ever accidentally hit your thumbnail while you were hammering, you may have seen what can happen when a nail gets badly bruised.

A little white spot on your fingernail is often the result of a much smaller injury. You might rap your nail while digging through a drawer, for example, and not feel any pain at all. An air bubble under the nail can also leave a white mark. And in rare cases, a white spot means that there is an infection present or a need for certain vitamins or minerals.

Doctors call the white spots leukonychia (loo-koh-NIK-ee-ah). Even though doctors gave it a long name, the spots are considered harmless. The white spot will move up as the nail grows and soon it will be cut away when the nail is trimmed.

Question sent in by Michelle Cataldo, Ballston Spa, NY.



Why do teenagers get pimples?

It's not because teens eat too many french fries and chocolate bars! Although a healthful diet, along with rest and exercise, will help keep skin healthy, most pimples are really just part of growing up.

As people move through their teen years, their bodies change. The changes are controlled by hormones, which are chemicals produced by the body. One type of hormone causes the oil glands in the skin to make more oil. The oil usually leaves the body through the pores (tiny openings) of the skin. But if a pore gets blocked or infected, the result is a blemish or a pimple.

A very bad case of pimples is called acne. Everyone, including preteens and adults, gets a pimple now and then. But most cases of acne clear up as kids grow older. No matter what your age, doctors say it's important to keep skin very clean. And when a pimple appears, leave it alone! That way it won't leave a mark.

Question sent in by Molly Bridgers, Dothan, AL.



Do you have a question that no one seems able to answer? Why not ask us? Send your question, along with your name, address, and age, to:

Any Questions?
3-2-1 CONTACT
P.O. Box 40
Vernon, NJ 07462

What are clouds made of?

Clouds may look like fluffy cotton candy but they're really full of wet dust! Even on a cloudless day, the air is filled with particles of dust. When moisture in the air cools, it turns from a gas into a liquid, and tiny drops of water form around the dust particles. If the temperature drops low enough, the moisture turns to ice crystals. So a cloud is really a big bunch of water droplets or ice crystals and dust.

Clouds that form high up in the sky where the air is coldest are all ice.

A cloud may be huge and billowy, flat and layered, or thin and wispy, depending on the weather conditions when it forms. Sometimes clouds are combinations of these types. People who know how to "read" clouds can predict the weather. When clouds grow thick and dark, keep an umbrella handy. There's bad weather ahead...or overhead!

Question sent in by Jennifer Messier, Wilton, ME.



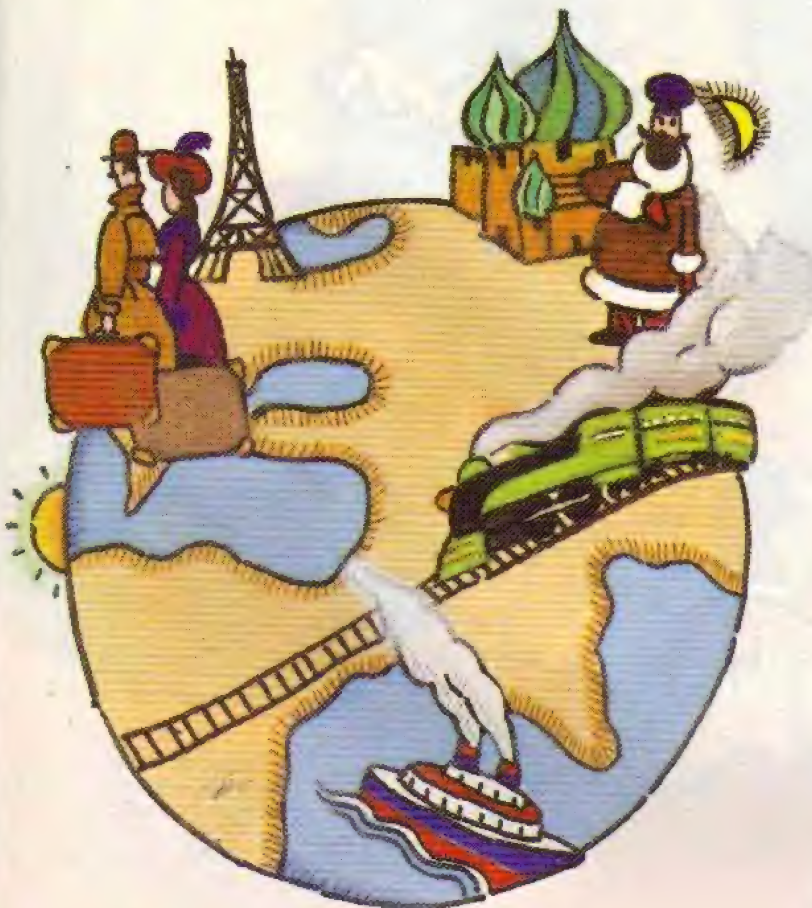
Why do we have different time zones?

Before time zones were set up, there was a lot of confusion—especially for long-distance train travellers. It was impossible to know what time a train would arrive in different cities. (The Earth rotates, so it is noon at different times in different places.) In order to have less confusion, some standard of telling time had to be set up.

At an international meeting in 1884, the Earth was divided up into 24 time zones. These zones matched the 24 hours that it takes Earth to rotate on its axis.

Within each zone, the time would be the same. If you move one zone to the left or right, it would be one hour earlier or later. London, England was chosen as the starting point. So, when it is noon in London, the time in the next zone east is 1 p.m. The time in the next zone west is 11 a.m. New York is five zones west of London. What time is it in New York? 7 a.m. Breakfast time!

Question sent in by Erika Woods, Bernalillo, NM.



HOW TO PLAY

PLACE GAME PIECES ON START.
ROLL DICE AND MOVE YOUR GAME
PIECE. IF YOU LAND ON A "TRUE
OR FALSE SQUARE," ANSWER THE
QUESTION, AND THEN CHECK YOUR
ANSWER. IF IT'S RIGHT, ROLL AGAIN.
IF NOT, YOUR FRIEND ROLLS. LAND
ON A "PICTURE SQUARE," AND
YOU LOSE A TURN. WHOEVER
REACHES THE END FIRST, WINS!

START

1. COLGATE JUNIOR IS
MADE JUST FOR KIDS.

TORF

2. RINSING YOUR MOUTH
WITH WATER IS AS
GOOD AS BRUSHING.

TORF

3. PLAQUE IS MADE OF
HARMFUL, STICKY
INVISIBLE GERMS
WHICH FORM IN
YOUR MOUTH.

TORF



4. TO BE SURE YOU
CLEAN YOUR TEETH WELL,
YOU SHOULD REPLACE
YOUR TOOTHBRUSH
EVERY 1-3 MONTHS.

TORF

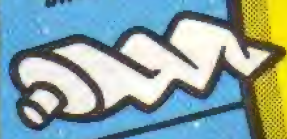
5. JUST A FEW
SECONDS BRUSHING
IS ALL YOU NEED TO
CLEAN YOUR TEETH.

TORF

6. THE COLGATE JUNIOR
TOOTHBRUSH IS ONLY
FOR FUN.

TORF

oops!
YOU RAN OUT OF
TOOTHPASTE!
BACK 1 SPACE.



7. FLUORIDE IS
SOMETHING IN
TOOTHPASTE THAT HELPS
PREVENT CAVITIES.

TORF

8. YOU ONLY
NEED TO HAVE
YOUR TEETH
CLEANED BY YOUR
DENTIST OR HYGIENIST
ONCE A YEAR.

TORF



9. COLGATE JUNIOR IS THE
ONLY TOOTH PASTE THAT
COMES WITH A
TOOTHBRUSH.

10. COLGATE JUNIOR IS THE
ONLY TOOTH PASTE THAT
COMES WITH A
TOOTHBRUSH.



SIMPLY CUT DICE WITH SCISSORS.
FOLD ALL TABS ALONG DOTTED
LINE. THEN TAPE "1 TO TAB A," "2
TO TAB B, AND "3 TO TAB C.
(NOW YOU'RE READY TO ROLL!)

ANSWERS

- 1. TRUE - SO BRUSH ALL THE SURFACES OF YOUR TEETH.
- 2. FALSE - AT LEAST TWICE.
- 3. TRUE - THAT'S WHY COLGATE JUNIOR HAS FLUORIDE.
- 4. TRUE - THE COLGATE JUNIOR TOOTHBRUSH WORKS GREAT AND IS FUN TO USE.
- 5. FALSE - YOU SHOULD SPEND AT LEAST 1 MINUTE BRUSHING TO GET TO ALL SURFACES OF YOUR TEETH.
- 6. FALSE - THE COLGATE JUNIOR TOOTHBRUSH IS ONLY FOR FUN.
- 7. TRUE - THAT'S WHY COLGATE JUNIOR HAS FLUORIDE.
- 8. FALSE - AT LEAST TWICE.
- 9. TRUE - SO BRUSH ALL THE SURFACES OF YOUR TEETH.
- 10. TRUE - THAT'S WHY COLGATE JUNIOR HAS FLUORIDE.

ate Junior Presents

DO IT

CONSEQUENCES!

Game 2

10. COLGATE JUNIOR IS A FUN WAY TO GET TERRIFIC TASTE AND CAVITY PROTECTION FOR YOUR TEETH.

ONLY TOOTHBRUSHES THAT COME OUT LOOKING LIKE A STAR.

TORF

11. PLAQUE GERMS CAN FORM EVERYWHERE IN YOUR MOUTH.

TORF

YOU DIDN'T SEE YOUR DENTIST THIS YEAR! BACK 2 SPACES.



THE END

I FORGOT TO BRUSH BEFORE BEDTIME! BACK 1 SPACE.

WH

HEY KIDS! HERE'S A GAME JUST FOR YOU FROM THE TOOTHPASTE THAT'S JUST FOR YOU—COLGATE JUNIOR! AND GUESS WHAT? IF YOU SEND ME A TRUE-FALSE QUESTION ABOUT DENTAL CARE, I'LL SEND YOU A BRAND-NEW COLGATE JUNIOR T-SHIRT! SO YOU CAN BE A COLGATE SUPERSTAR, TOO! JUST REMEMBER TO INCLUDE YOUR NAME, ADDRESS, AND SIZE, AND MAIL TO ME, THE COLGATE SUPERSTAR, AT: P.O. BOX 1624, RIDGELY, MD 21681. GOOD LUCK, AND KEEP ON BRUSHING!

*WHILE SUPPLIES LAST.

OFFER EXPIRES DEC '89.

1 - TRUE - AND IT'S THE ONLY TOOTHPASTE SHAPED LIKE A STAR.
2 - FALSE - BRUSHING YOUR TEETH IS THE MOST IMPORTANT WAY TO CLEAN YOUR TEETH.
3 - TRUE - PLAQUE IS A BACTERIA WHICH FORMS EVERYWHERE IN YOUR MOUTH.
4 - TRUE - AFTER 1-3 MONTHS, TOOTHBRUSHES DRAIN CLEAN YOUR TEETH AS WELL AS NEW



© 1989 Colgate-Palmolive Co.

CONTACT TAKES A TURN AT SAVING TURTLES



by Eric Weiner

Turtle Watch

It's two in the morning, almost pitch-black, and hot. Our group is making its way single-file across a boulder-strewn beach in Quintana Roo, an area of Mexico along the Caribbean Sea. Suddenly Reyna Gil, the Mexican scientist leading our group, stops short.

"Everybody down," she says quietly.

We all kneel in the sand as Reyna, crouching down, moves on ahead. She is following a streak of churned-up sand that looks as if it were made by a small tractor.

We wait silently. In a minute, Reyna hurries back. "She is laying now," she whispers. "¡Vamonos!" (That means "Let's go!" in Spanish.)

Up ahead, in the center of a huge pit, sits a giant sea turtle with a shell almost three feet long. At first the turtle appears totally still. Then I see its rear flippers rise gently in the air. It has laid another egg.

I'm here on an Earthwatch expedition. Volunteers can go along on Earthwatch trips to help scientists with their work. The scientists in Quintana Roo are trying to learn more about the lives of sea turtles. They are also trying to keep

the sea turtles from becoming extinct.

During nesting season, sea turtles drag themselves up the beach in the dark to bury their eggs. The problem is, some people love to eat turtle eggs. They will pay up to \$2 per egg.



That's why volunteers and scientists patrol the beaches every night. Our goal is to dig up all the eggs and move them to a protected hatchery. If we don't, poachers—illegal hunters—will rob the nests and sell the eggs.

Turtles Are In Danger

Sea turtles are in serious trouble, and not just because of poachers. For years, ships have been dumping garbage in the oceans. To a turtle, a plastic bag floating in the water looks just like a tasty jellyfish dinner. Turtles who swallow plastic bags choke and die.

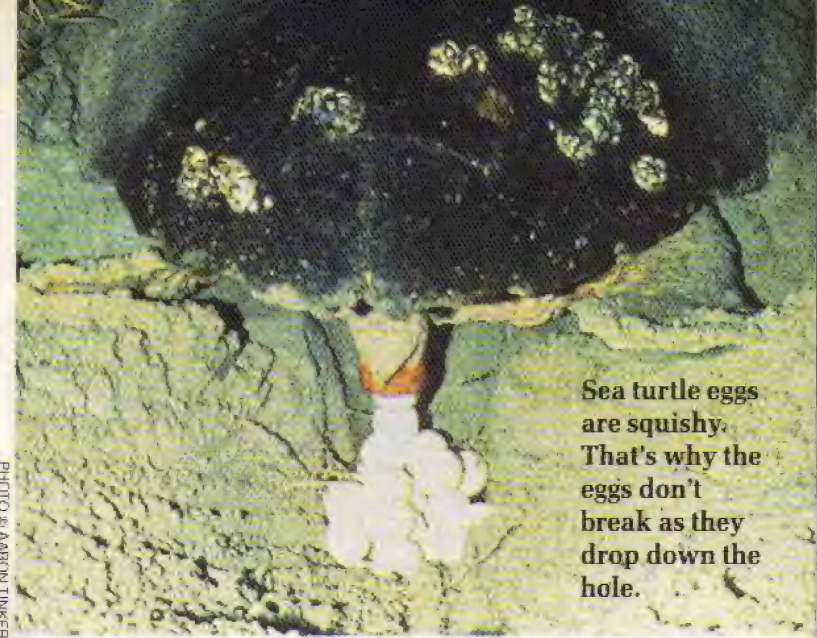
Turtles also get tangled in fishermen's nets. To save their expensive nets, the fishermen shoot the turtles.

With all these problems, sea turtle populations are shrinking fast. According to Tundi Agardy, one of the scientists leading the expedition, there are only 10,000 to 20,000 loggerhead turtles left in this part of the world.

One of those loggerheads is the turtle Reyna just found. "Mary," Reyna now whispers to a volunteer, "start getting the eggs."

Mary digs a track in the sand right next to the turtle's rear flippers. Lying face down in the sand, Mary reaches in and pulls out the eggs as the turtle lays them. The eggs look like Ping-Pong balls. They are covered with glop and sand.

While Mary gets the eggs, it's my job to mea-



Sea turtle eggs are squishy. That's why the eggs don't break as they drop down the hole.

sure the turtle's shell, flippers, and head. Measurements like these will help the scientists learn the rate at which sea turtles grow.

As I position the measuring tape, the turtle lifts up her head, as if to look at me. The turtle's skin, wrinkled around her neck, looks leathery and old. Her eyes are large, dark, and mournful. She looks like E.T. I wish there were a way to let the turtle know we're here to help.

My First Solo Mission!

Scientific expeditions are hard work. The volunteers stay up until 4:00 in the morning. And the scientists are working even harder ➔

Left: The sea turtle who made these tracks may have been scared off by lights from nearby houses.

Right: That's me in the striped shirt, checking on the turtle's head size. When the turtle turns to go, there will be no stopping it.



than we are. Each night, after Reyna drives us back to our cabin, she hikes on more beaches!

One night my group comes across so many turtles that Reyna sends me and Tod, another volunteer, on ahead. If we find a turtle, we're supposed to signal the rest of the group by flashing our flashlights twice. The rest of the time, Tod and I have to keep our flashlights off so we don't alarm the turtles. Otherwise, they might go back to sea without laying.

Thwack! I bump into a huge boulder and almost trip and fall. "Big rock," I whisper. Then I stop. In front of me are tracks.

"Look," I whisper. Tod and I crouch down. I carefully make my way up the beach, following the tracks. The tracks disappear into the shrubbery. I peer into the bushes. There it is!

"It's digging," I tell Tod when I get back. "Let me have your flashlight." I point Tod's flashlight back down the beach and flash it frantically: One, two! One, two!

Moments later, two more volunteers rush up. We all peer into the bushes. I feel myself blushing. My turtle isn't a turtle at all. It's a big rock!

Here Come the Hatchlings!

It's four in the afternoon and it's pouring. The wind is blowing icy cold rain into my face and ears. All the volunteers are headed to the hatchery to visit a nest of newborn turtles.

"The hatchlings try to time it so that they



PHOTO © CLOBO

hatch at night," Tundi tells us. That's because at night they have a better chance of scrambling to the ocean before birds, crabs, and other predators gobble them up.

When hatchlings come out at the wrong time, the scientists keep the babies in the hatchery where they're safe, until dark.

A hatchery is a small part of the beach with a fence around it to keep out the coatimundis. (Coatimundis are a kind of raccoon that likes to dig up turtle nests.) In the hatchery, the turtle nests are in neat rows, with little numbered stakes marking each nest.

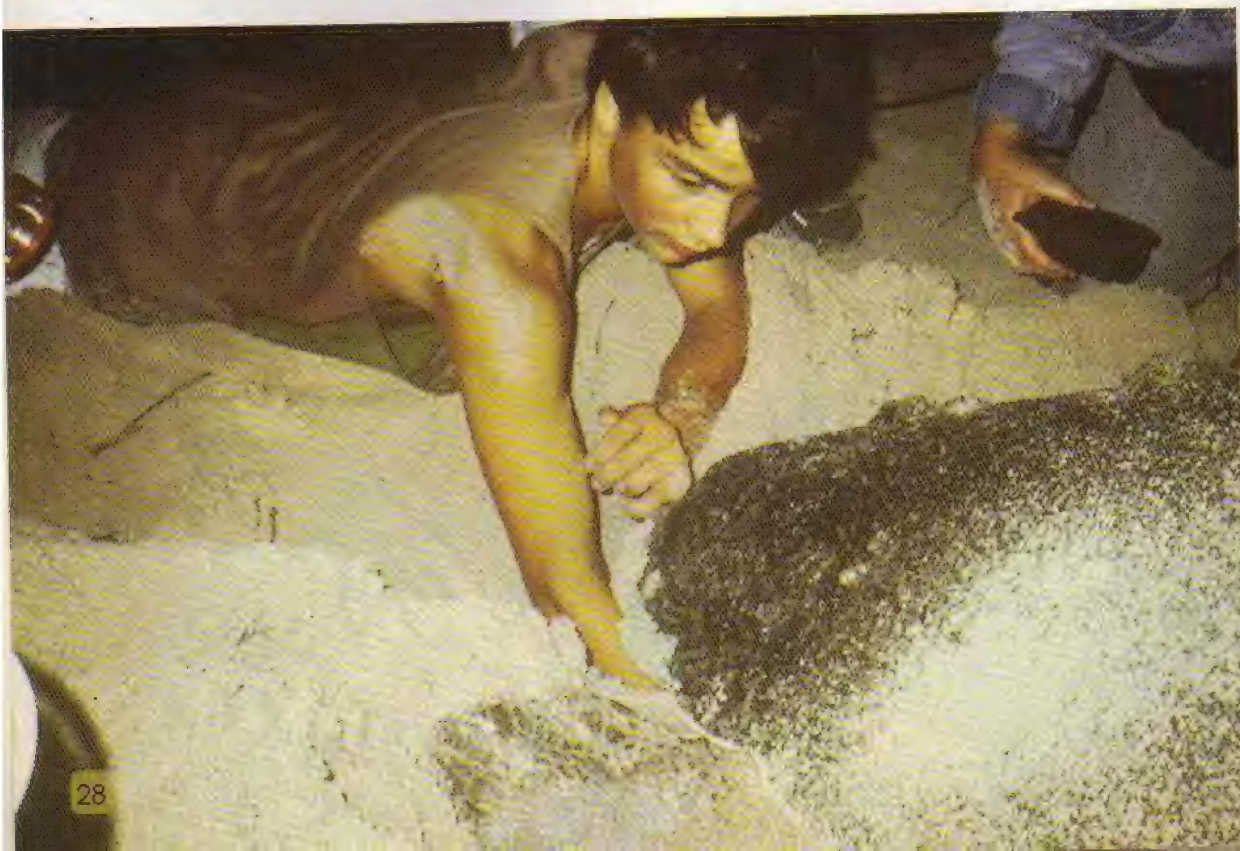


PHOTO © TUNDI AGAROV

Left: One of the scientists' assistants, Aaron Tinker, reaches under a sea turtle to catch her eggs as she lays them.

Left: A hatchling's life isn't easy, but it may be brief. Crabs, crocs, birds, foxes—lots of animals love to feed on baby turtles.

Right: The fenced-in hatchery, the only place a baby sea turtle is truly safe. Buried deep under each stake is a nest of eggs.



"Stick out your hand," Reyna tells me when I reach the hatchery. She hands me what looks like a small green rock. Except it's wriggling.

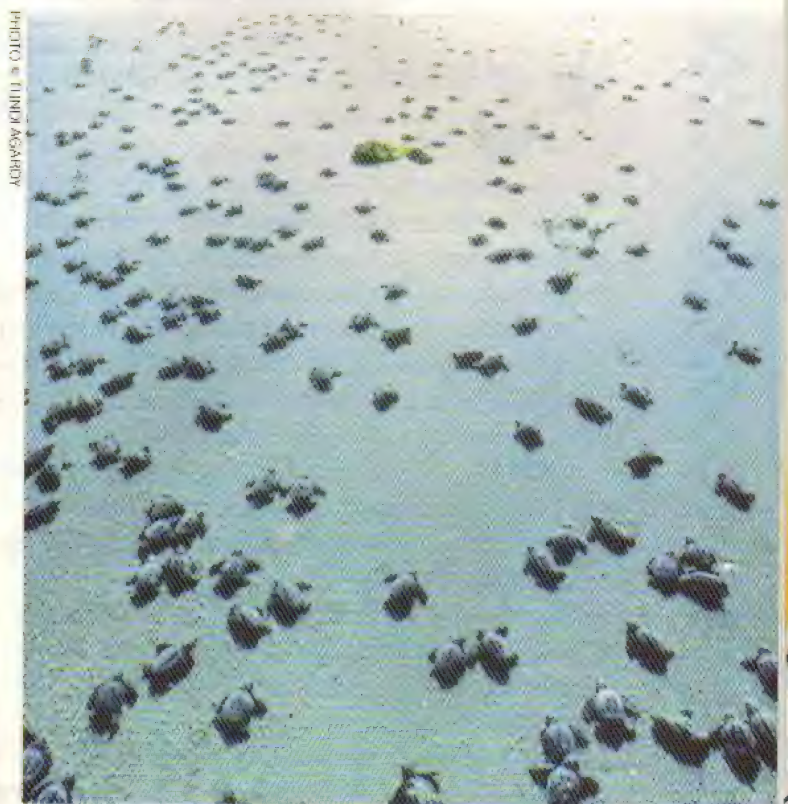
Here is one of the babies we've been working so hard to save! It's tiny—only a couple of inches long. Hard to believe it may someday grow up to weigh 800 pounds. Right now, it has to struggle to pull itself over my hand. Its teensy leathery flippers tickle my palm.

That night, my group sets the hatchlings free and watches them crawl off into the ocean. Once in the ocean the tiny turtles still aren't completely safe. Riding in clumps of seaweed will hide only some of them from predators. But as the last hatchlings disappear into the water, the volunteers let out a cheer.

At least we have gotten them this far. **220**

Editor's Note: Shortly after CONTACT's reporter returned from Mexico, deadly Hurricane Gilbert struck Quintana Roo. The hurricane destroyed about half of the turtle eggs that volunteers had saved.

"That just makes our work this summer that much more important," a saddened Tundi Agardy told CONTACT. The hurricane attack means that the turtles need people's help all the more.



Above: The race is on! A hundred baby turtles scramble for the ocean.

THE BLOODHOUND GANG

"Catch as Cat Can"

By Becky Cheston



WGuess who that was," said Vikki, hanging up the phone. "Golda Sims!"

"The Cat Lady?" asked Skip.

"None other. And she has a case for us. Her cats have been acting strangely. She thinks there's some sort of spirit or ghost in her house!"

"Are you sure this is for real?" asked Ricardo.

"I don't know," Vikki replied. "But I think we should check it out. Golda says that the police won't take her seriously."

Vikki, Skip, and Ricardo approached Brooke Point, a neighborhood with big old houses. "You sure don't need an address book to tell you we're here!" said Skip.

A tabby cat was chasing a group of kittens through the bushes. Six other cats of various colors were lazing on the lawn in the warm spring sun.

"I wouldn't go in there if I were you."

The warning was given by a 12-year-old boy who was standing on the next lawn. "She's nuts," he added, making a circle around his ear with his finger.

Skip rang the doorbell.

Golda opened the door. "That's Timmy Rob-

bins," she whispered to the Bloodhound Gang. "one of my young neighbors. Just ignore him."

Golda Sims looked as if she could have been a cat herself, with curly gray hair matching a furry gray sweater and a gray wool skirt. In her living room, Golda had to shoo cats off the furniture so the Bloodhound Gang could sit down.

"Tell us what's been happening," said Vikki.

"Well," Golda began, "for the past several weeks, my little darlings have been acting very strangely. Late at night—not every night, of course—they all go crazy. It happens all of a sudden. They all prick up their ears and start meowing. Some of them hide under the furniture. It happened again just this morning."

"And you think the cats may be sensing some sort of alien presence?" asked Ricardo, trying to keep a straight face.

"I know," said Golda, "you think I'm crazy. So do the police. But why else would my cats act like this?"

Just then, the Bloodhound Gang was startled by the sound of someone running up Golda's front steps. The cats scrambled for cover as a woman charged in the front door.

"Golda," she cried, "I've been robbed."

The Cat's Out of the Bag

Golda introduced the woman, Eva Ling. While Ricardo phoned the police, Eva led Vikki and Skip across the street to her house. Golda Sims followed, a half-dozen cats trailing at her heels.

According to Eva, the thief had taken expensive jewelry. But somehow, the thief had avoided setting off the alarm.

"I have a unique sort of alarm system," she explained, pressing a switch in the hallway. "When I push this button down, a beam of light shoots across the room. It's like tying a rope between the walls about two feet from the floor. If anything breaks that beam, the alarm rings."

Skip took a few steps forward. Alarm bells began to ring.

"Did you remember to turn the alarm on when you left this morning?" questioned Vikki.

"Yes, I remembered," answered Eva. "But when I came in this afternoon, it was off. No one could get near that alarm to turn it off."

A loud sneeze brought their attention to the front door. Entering were Detective Trowbridge, several police officers and Ricardo.

Trowbridge groaned. "I'm allergic to cats!"

After Trowbridge and the officers had toured the house, the detective approached the Bloodhound Gang. "This is the fifth unexplained robbery in this neighborhood this month," he grumbled, blowing his nose. "Have you turned up any clues?"

"We're here on a different case," said Skip.

"We're looking into Golda's ghost."

"The cat lady!" said Detective Trowbridge, sneezing violently. "Give me a break."

"Hey," called Vikki, "look at this." She was standing on the back porch. When Skip, Ricardo and Trowbridge came outside, she knelt and pointed to a track of animal footprints.

Trowbridge laughed, then sneezed. "Nice work, Vikki," he said. "But I'm afraid I don't need any help finding the cats!"

Cat's Pajama Party

"This is not exactly my idea of a slumber party," said Ricardo as he removed a cat from his pillow.

For the past three nights the Bloodhound Gang had been camping out in Golda's living room. They had been hoping to witness the strange cat behavior.

"All we have to show for the past two nights is cat fur on our sleeping bags," Ricardo complained. "I'd rather be out trying to solve those burglaries."

"Maybe the two cases are related," said Skip. "Do you suppose some creature is using mysterious powers to get into those houses?"

"And that same creature could be spooking Golda's cats?" said Ricardo.

"Get real," Vikki chided.

But all of a sudden, the black cat leaped off the mantle and slithered under the couch. There was a chorus of meows as cats awoke, hid, and perched on the window sills.

"Let's search the house," said Vikki. "Who wants to look around outside?"

Vikki stopped. She was staring out through the living room bay windows, into the darkness. "Someone's out there," she whispered. Then she raced out the front door.

Skip and Ricardo hurried after her. But whomever Vikki had spotted was running too. The prowler made it across several lawns before Vikki tackled him. A small object went flying out of his hands as he went down.

"C'mon," whined the boy, "let me go!"

"Timmy Robbins," said Ricardo, running up. "You've got some explaining to do." ➔





"You can start with this," said Skip, picking up the object that Timmy had dropped.

"What is it?" asked Vikki, standing up but keeping a firm hand on Timmy's neck.

"It's a dog whistle," mumbled Timmy.

Skip blew the whistle, but no sound came out. "I guess it's broken," he said.

"Not at all," said Vikki. "C'mon, ghost," she said to Timmy. "You're going to apologize."

Timmy looked very uncomfortable sitting in Golda's living room, apologizing to Golda.

"But how can this whistle disturb my cats?" Golda asked. "No sound comes out."

"No sound we can hear," Vikki explained.

"I remember!" said Ricardo. "Sound is produced by vibrations. Fast vibrations are known as high frequencies."

"The human ear can only hear sounds that are within a certain range of frequencies," added Vikki.

"But some animals—like dolphins, bats, dogs, and cats—hear things at higher frequencies," said Skip.

"So night after night you've been blowing on this whistle, Timmy," said Golda. She shook her head. "Staying up late just to bother me. You ought to be ashamed of yourself."

"Hey," said Timmy. "Don't try to pin it all on me. I only did it tonight."

"Sure," said Skip.

"Honest," pleaded Timmy. "I found the whistle outside Mrs. Ling's house three days ago."

The Bloodhound Gang exchanged glances. Vikki grinned. "I think I just figured out how to track down the Brooke Point burglar!"

Cat Stakeout

The next night, Detective Trowbridge sat on Golda's couch, surrounded by piles of handkerchiefs.

"We got Golda to remember the exact times her cats have been going crazy," Vikki explained. "Except for last night, each incident matches up with a burglary on this block."

Suddenly, Golda's cats began meowing.

"It's starting again!" said Skip. "Quick, Detective! Call in the troops!"

Trowbridge switched on his walkie-talkie and alerted his cruisers. Before long, the police had a man in custody.

"We caught him outside Miriam Salter's house," an officer explained to Trowbridge.

"With this in his pocket." She held up a ruby bracelet.

Everyone was standing on Golda's front lawn, which was lit up by the lights of the police cars. "We also found this," said another officer. He was holding up a large black cat.

"I bet I can explain," said Vikki. "Or better yet, I'll show you."

At Vikki's suggestion, the group trooped over to Miriam Salter's house. "Turn your alarm back on," Vikki told Miriam.

Vikki blew on the dog whistle. The black cat the patrolman was holding jumped down and headed straight for the alarm box. It passed under the beam and sat on top of the alarm box. Its large weight was enough to press the switch and turn it off.

"What a wonderful cat!" exclaimed Golda, as the police locked the thief in the backseat of their cruiser. "But how did the thief know what kind of alarm system everyone had?"

"Because," said Miriam Salter, "that was Eliot West, the man who installed our alarms!"

Before the Bloodhound Gang left, Golda insisted on serving ice cream. She also put out special treats for her cats. "I'll sleep better tonight knowing there are no ghosts lurking about," she said.

"Right," said Skip, scraping the bottom of his bowl. "Turns out there was nothing supernatural about this case after all."

Ricardo laughed. "Just another cat burglar!" 420

KIDS!

Collect 'n Save '89



It's easy!
Just Collect 'n
Save the UPC
codes from any
Oscar Mayer
product and
you're on your way.
Here's just a sample of
some of the great equipment
you can get:



Easton/Mizuno Baseballs

Easton Aluminum Bats

T-ball, Baseball and Softball bats featuring both regular and thin grips. Proof requirements range from 55 to 130.

Louisville Slugger Wood Bats

Youth Baseball, Baseball, and Softball bats can be personalized and are made from top-grade northern white ash. Proof requirements range from 35 to 110.

Easton/Mizuno Baseballs

Alum-tanned cowhide baseballs for youth or adult leagues. Proof requirements range from 120 to 200 per dozen.

Mizuno Fielder's Gloves

T-ball, Baseball, and Softball all-leather gloves. Righthand or lefthand models. Proof requirements range from 65 to 220.

Mizuno White Batter's Gloves

Youth and adult gloves made of top-quality cabretta leather. Righthand or lefthand models. Proof requirements range from 25 to 30.



Mizuno
Fielder's Gloves

Now you can get brand
name baseball and
softball equipment
FREE!

(with proofs-of-purchase
from Oscar Mayer pro-
ducts plus shipping
and handling)



Easton Aluminum Bats



Louisville Slugger Wood Bats



Mizuno
White Batter's Gloves



**To get your
1989 Collect 'n Save
Equipment List and
Order Form write to:**

Oscar Mayer
Collect 'n Save Program
3 Stuart Drive
P.O. Box 5714
Kankakee, IL 60902

Contact Lens



PHOTO © 1987 BOB KRISTEL/BLACK STAR

One for the Birds

It looks like a giant egg carton or a scene from *Aliens II*. Actually, it's a field of flamingo nest mounds. If you look carefully, you can see the adult flamingos in the background.

Flamingos live near salt water and build their nests in the nearby marshes. It's the perfect feeding ground for their diet of shellfish, insects

and fish.

Each flamingo couple lays only one egg per year. To protect the egg from being carried away by possible floods, the adult birds build high nest mounds. It takes about 30 days for the egg to hatch. So, both father and mother take turns "egg sitting."

Special

**SQUARE
ONE**

Television

Section

WHERE DID THE *STAR TREK* CREW PARK THE *U.S.S. ENTERPRISE*?

**READ EACH PERSON'S CLUE—
AND FIGURE IT OUT.**

It's either at
STARBASE ELEVEN,
MARS, NEPTUNE or the
ANDROMEDA
GALAXY.
But, for some
mysterious
reason,
I don't
know
which!

I am sure that
our starship's
location
didn't have
an "X"
in its
title.

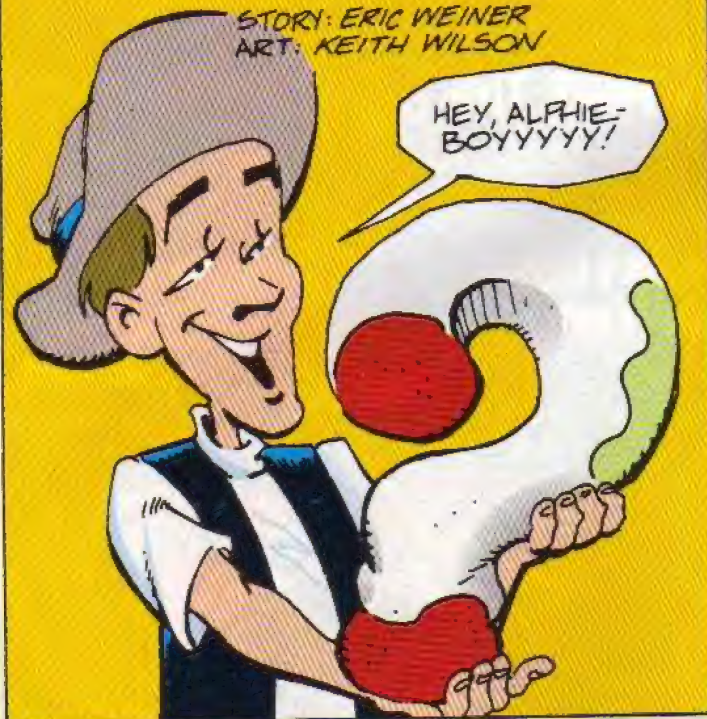
**STAR
TRICK**

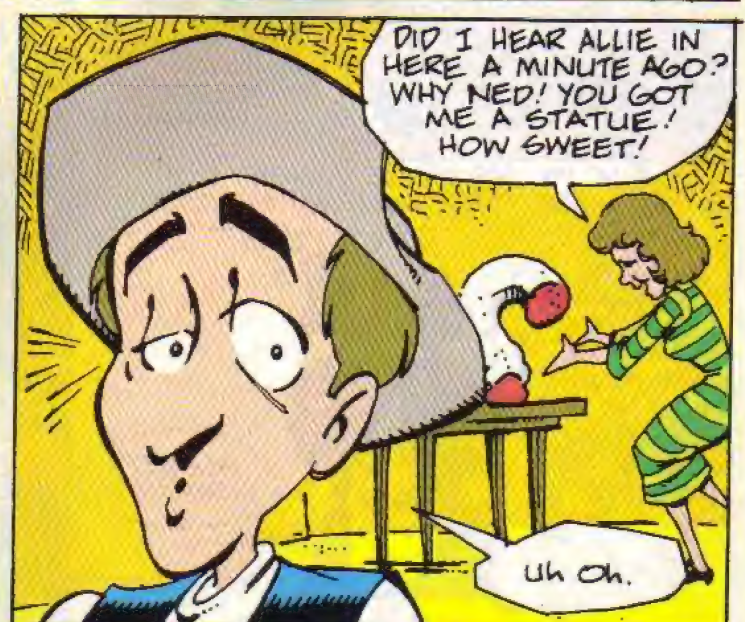
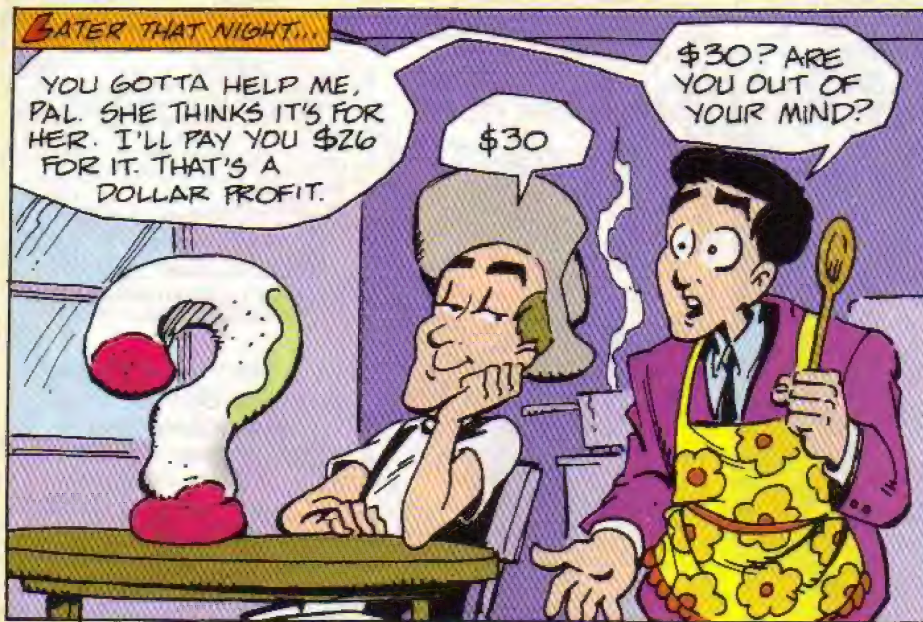
I can sense
that the
name of the
place was
more than
eight letters
long.

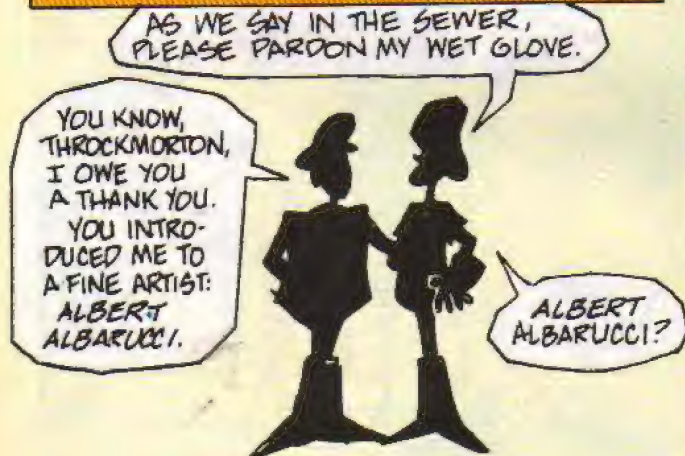
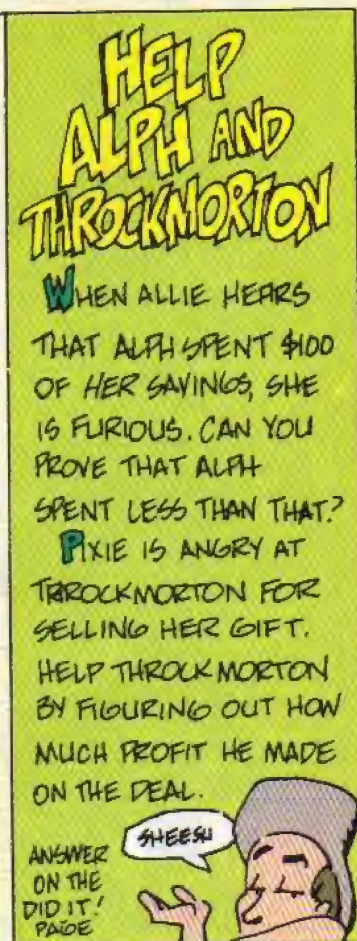
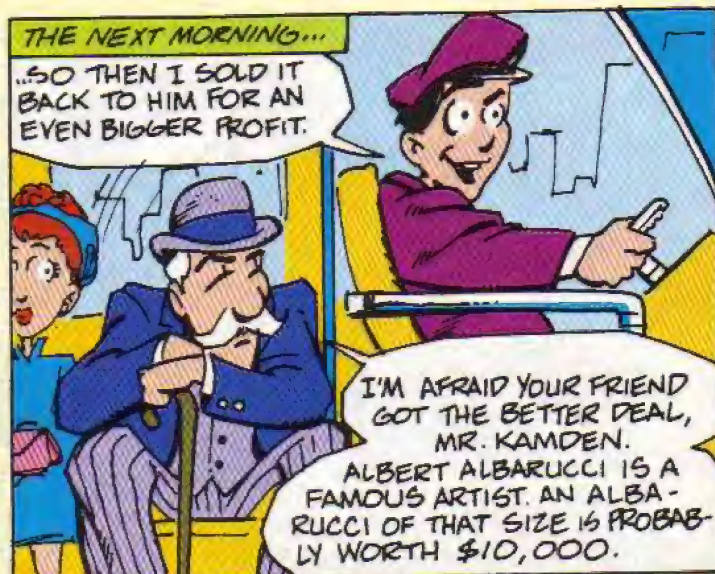
If we can't
figure this
one out,
we'd better
warp to
the Did
It! page.

THE *Phoneymooners* PUZZLE

STORY: ERIC WEINER
ART: KEITH WILSON







BLACKSTONE'S *Magic Page*

Learn this trick and amaze your friends!

**SOMEONE THINKS OF A NUMBER ON THE CLOCK.
LIKE MAGIC, YOU POINT IT OUT!**

1. Tell a friend to pick a number on the clock, without telling you what number they picked.



2. Say that you are going to point to the numbers on the clock with your pencil, one by one. Start by

pointing to the 7. Keep going *counter-clockwise*: 6, 5, 4, and so on.

3. Each time you point to a number, your friend is going to silently add *one* to their number—until they reach 20.

For instance, let's say your friend picks '11.' Then the first time you point to a number your friend silently counts '12.' Then '13,' and so on.

4. When your friend reaches 20, he or she should say, "Time." Presto! You will be pointing to the number they chose. It works every time!

Can You Solve the Puzzle?

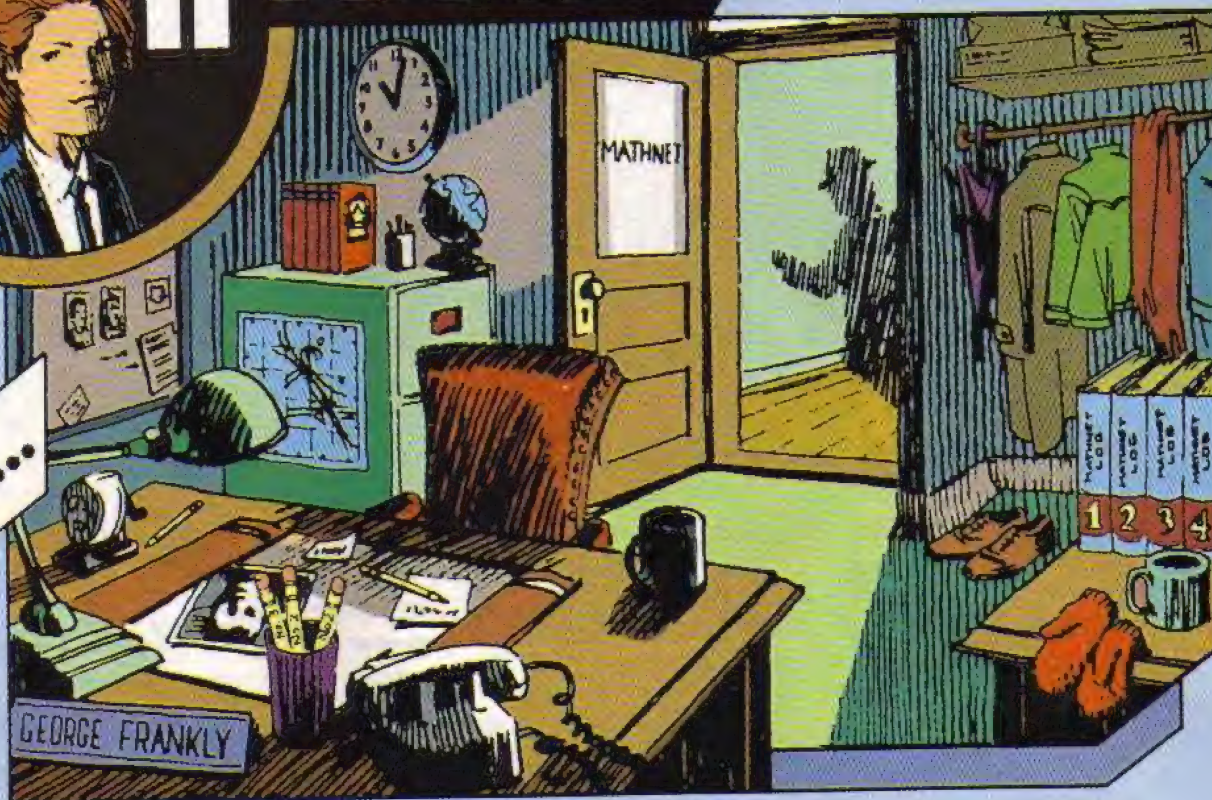
MATHNET MYSTERY

That's right. We were robbed.

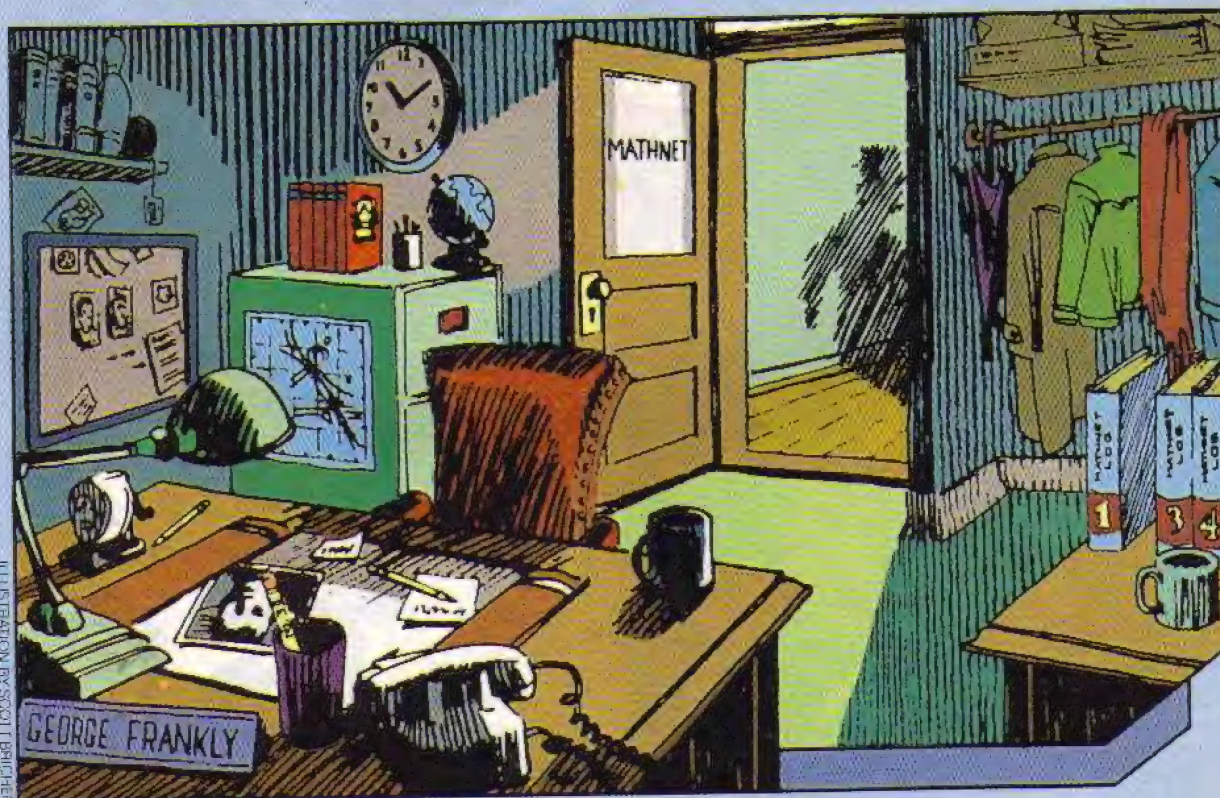
First check out the "Before" picture. Then study the "After" picture. Figure out *which* items were stolen. Why did the thief steal these particular objects? Try to find the pattern!

Answer on the Did It! page.

Before...



After...



Reviews

Books

Amazon

by Sara Compton
McGraw-Hill Book Co., \$3.95

Amazon is one of four books in the Earth Inspector series. In these books, you are a character from the planet Turoc on a mission to Earth. At the end of each chapter, you are given a choice. Depending upon

your decision, you will be sent to a different part of the book—and deeper into the jungle!

In *Amazon*, you are searching for a cure for your friend Shala who received a snakebite somewhere in the jungle. She tells you that an Indian named Kolana can give you the cure—but she doesn't know where he lives.

Will you find Kolana? Will you get back to Turoc in time? Your decisions make the difference.—
Jonathan Rosenbloom



Software

Jam Session

For Macintosh computers.
Broderbund Software
\$39.95

This program was designed for people who love music but don't know how to play. First, you choose the musical style. Then, the computer plays the background music while you play "lead" using your computer keyboard. Each number or letter calls up a different pattern of notes, and the program makes them fit the background music automatically!

There are more than 30 musical styles to choose from, including classical, heavy metal and "Country Chicken Jamboree." *Jam Session* is very easy for anyone to use. Even serious musicians will have a lot of fun with this great sounding program.

—Russell Ginns

R.B.I. Baseball

For Nintendo Systems
Tengen, Inc., \$29.95

There are many different computer baseball games around, but we thought that this was one of the best. It's easy to play, and there's



enough action and excitement so you'll want to try it over and over.

You can choose from 10 different teams and play against the computer (which is really tough to beat). Or you can play against another player. You control all the pitching, batting and fielding. You also get to decide when to change pitchers or any other players.

Best of all, *R.B.I. Baseball* uses the names and stats of real major league baseball teams. If you are a baseball fan, or if you just like action video games, we think you'll have fun with this one.

—R.G.

Games

Kage

TSR, Inc., \$12.95

Here's a strategy game that you can play with a friend. It's easy to learn, and each game only takes 10 or 15 minutes to play.

The object is to trap your opponent's piece in a "kage." Each turn you can either place one "bar" on the board or move your piece to a new spot. If you capture the other player before she captures you—you win.

Sound easy? That depends on your opponent. If you have a friend who is as clever as you are, *Kage* is a great way for the two of you to match wits.

—R.G.

Basic Training

Save the Turtles

After reading this issue of CONTACT, you know that scientists are trying to save rare sea turtles in Mexico. This computer game might give you some idea how important good planning is when it comes to saving turtles.

You are in charge of a sea turtle sanctuary. At the start of the game there are 100 turtles. Your job is to help the turtles find a safe place to lay their eggs.

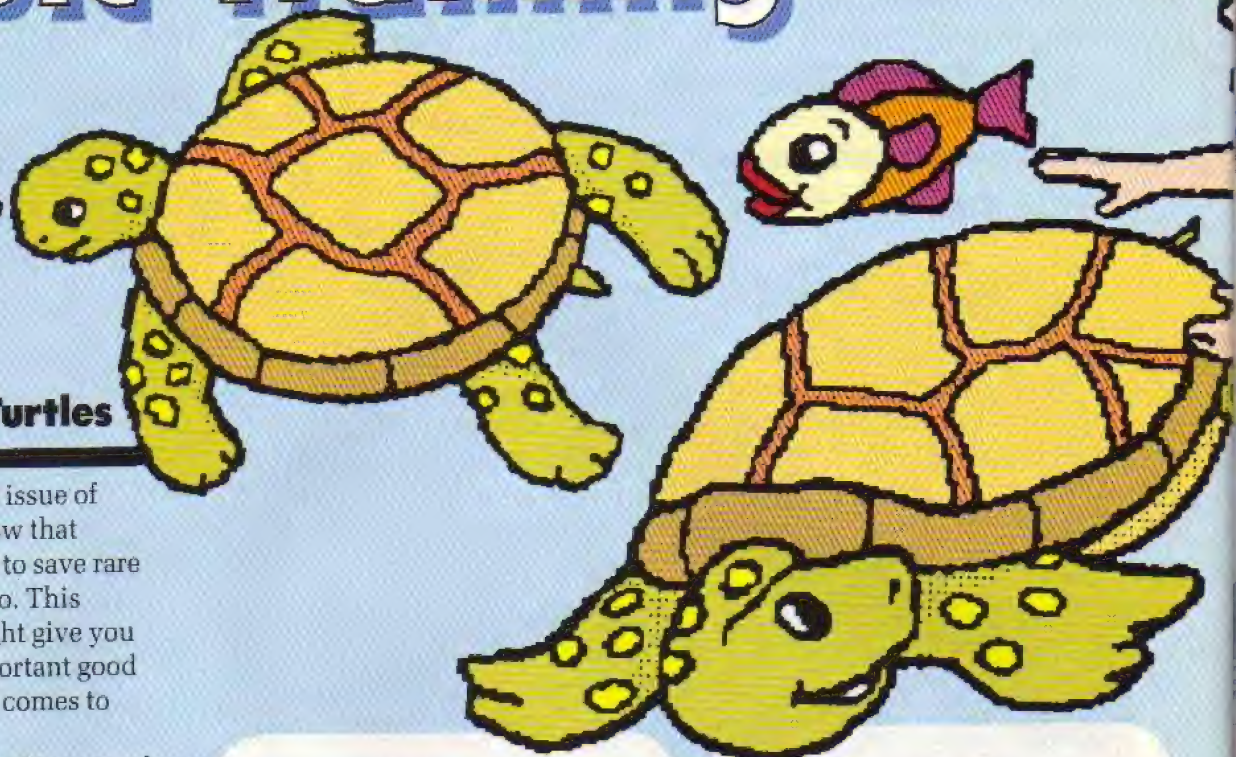
Each turn you are given a budget of \$10,000. (Saving turtles is an expensive job!) Use the money to buy up beach front, hire workers or buy equipment. Each 100-foot plot of beach has room for 10 turtles. Each worker can collect eggs from three nests.

The turtles have a much better chance of surviving if there is room in the sanctuary for them. They do even better if there are enough workers to collect their eggs. But you won't have enough money for everything, so plan carefully.

The program is written for Apple II computers. To adapt it for other computers, follow these instructions:

Commodore 64/128: Change all HOME statements to PRINT CHR\$(147)

IBM: Change all HOME statements to CLS



Apple II

```

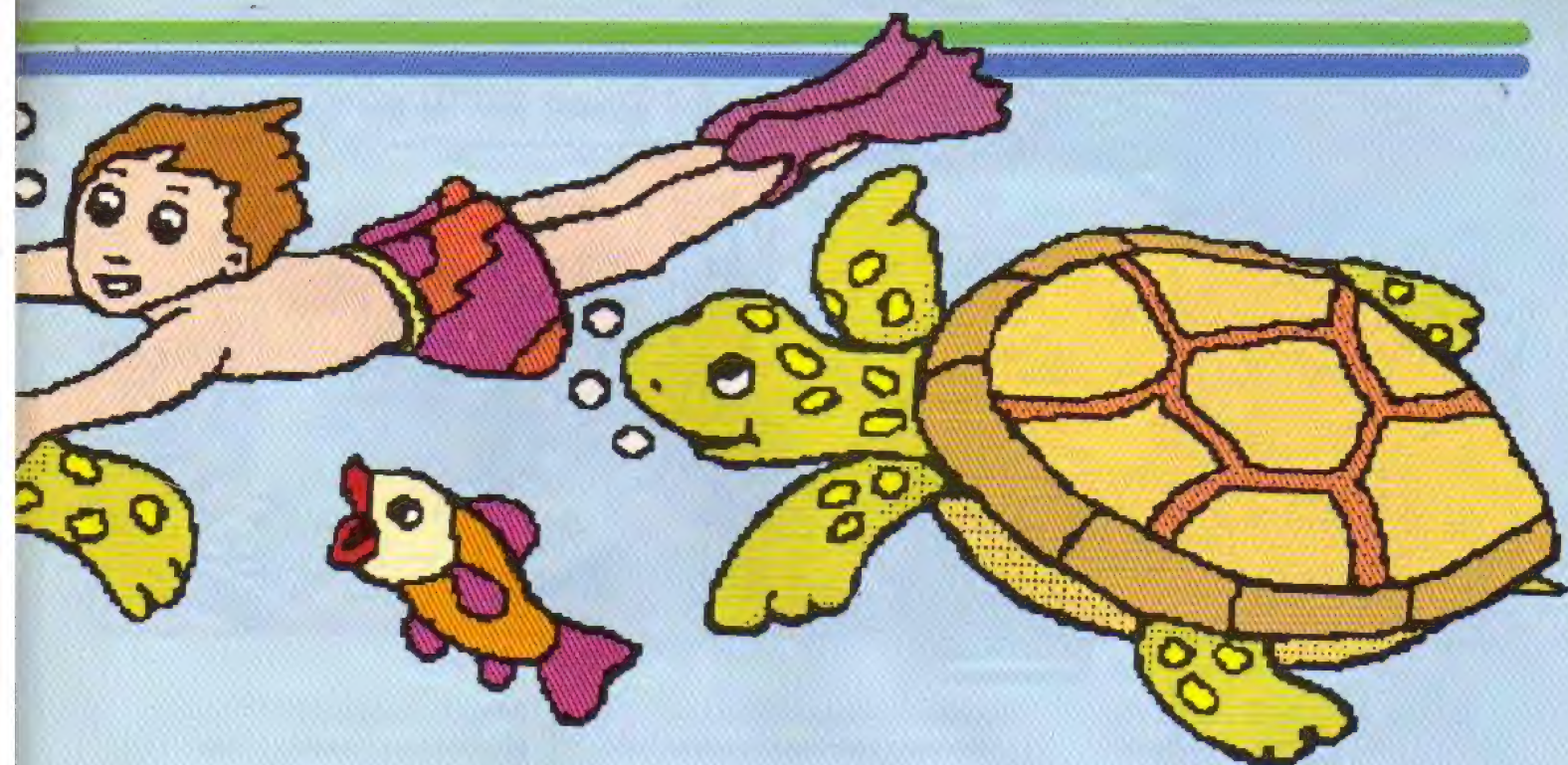
10 REM SAVE THE TURTLES
20 SE = 0:MO = 0:TU = 100:TL = 100
30 HOME
40 MO = MO + 10000:WO = 0
50 SE = SE + 1
60 PRINT "SAVE THE TURTLES"
70 IF SE > 2 THEN GOSUB 750
80 PRINT:PRINT "THIS IS NESTING SEASON NUMBER";SE
90 PRINT:PRINT "LAST YEAR";TL;" TURTLES CAME ASHORE."
100 PRINT:PRINT "THE TURTLE SANCTUARY OWNS"
110 PRINT BE;" FEET OF BEACH."
120 PRINT:PRINT "YOU HAVE";WO;"WORKERS TO COLLECT EGGS."
130 PRINT:PRINT "THERE IS";MO;"DOLLARS IN YOUR BUDGET"
140 PRINT:PRINT "YOU HAVE";EQ;"SETS OF SHOVELS, BUCKETS AND FLASHLIGHTS."
150 PRINT:PRINT "PLAN YOUR BUDGET FOR THE YEAR."
160 INPUT "HOW MANY 100 FT PLOTS OF BEACH WILL YOU BUY? (10000)";NB
170 INPUT "HOW MANY SETS OF EQUIPMENT? (50)";NQ

```

```

180 INPUT "HOW MANY WORKERS WILL YOU HIRE? (1000)";NW
190 REM FIGURE BUDGET
200 BU = NB * 10000 + NQ * 50 + NW * 1000
210 PRINT:PRINT "YOU HAVE SPENT";BU;"DOLLARS."
220 IF BU <= MO THEN 270
230 PRINT "THERE IS ONLY";MO;"IN YOUR BANK ACCOUNT. TRY AGAIN"
240 FOR DE = 1 TO 2000: NEXT DE
250 HOME
260 GOTO 150
270 MO = MO - BU:BE = BE + NB * 100:WO = NW:EQ = EQ + NQ
280 FOR DE = 1 TO 2000: NEXT DE
290 HOME:PRINT "THE TURTLES ARE ARRIVING!! TYPE IN YOUR INSTRUCTIONS FOR YOUR WORKERS."
300 INPUT PT$
310 HOME:PRINT TU;"TURTLES ARRIVED."
320 IF BE > 0 THEN 350
330 PRINT "THERE IS NO SANCTUARY FOR THEM."
340 TN = TU:GOTO 520
350 REM FIGURE RESULTS
360 TB = BE / 10: IF TB > TU THEN 400
370 TN = TU - TB

```

```

380 PRINT "ONLY";TB;
    "TURTLES FOUND NEST
    SITES IN THE SANCTUARY."
390 GOTO 410
400 PRINT "THERE WAS PLENTY
    OF ROOM IN THE
    SANCTUARY."
410 REM WORKERS
420 IF WO <= 0 THEN PRINT
    "YOU HAVE NO WORKERS—
    NO EGGS WERE
    COLLECTED.": GOTO 520
430 IF EQ >= WO THEN 460
440 PRINT "THERE WASN'T
    ENOUGH EQUIPMENT FOR
    THE WORKERS."
450 WQ = EQ: GOTO 480
460 PRINT "EACH WORKER HAD
    A SET OF EQUIPMENT"
470 WQ = WO
480 PRINT WQ; "WORKERS
    COLLECTED EGGS."
490 TC = WQ * 3: IF TC > TB
    THEN TC = TB
500 PRINT "THEY COLLECTED
    EGGS FROM";TC; "NESTS."
510 PRINT TC * 100; "TURTLES
    HATCHED AND WERE
    CARRIED TO THE OCEAN."
520 PRINT : PRINT "THE
    EGG-LAYING SEASON IS
    OVER."
530 FOR DE = 1 TO 3000: NEXT
    DE
540 PRINT "A YEAR HAS
    PASSED"

```

```

550 PRINT "PRESS RETURN TO
    CONTINUE"
560 INPUT A$
570 TL = TU
580 TU = TU - INT (TN * .25) -
    INT (TB * .05)
590 TB = TB - TC
600 TU = TU + TC + INT (TB * .40)
610 IF TU < 40 THEN 640
620 IF SE = 10 THEN 670
630 GOTO 30
640 REM YOU FAILED
650 PRINT "THERE ARE
    ONLY";TU; "TURTLES LEFT.
    YOU ARE FIRED!!"
660 GOTO 740
670 REM END OF GAME
680 PRINT "YOU HAVE
    COMPLETED 10 SEASONS."
690 PRINT "THERE ARE
    NOW";TU; "TURTLES."
700 IF TU <= 100 THEN R$ = "A
    FAIR"
710 IF TU > 100 THEN R$ = "A
    GOOD"
720 IF TU = > 150 THEN R$ =
    "AN EXCELLENT"
730 PRINT "YOU HAVE
    DONE";R$; "JOB."
740 END
750 REM PROBLEMS
760 P = INT ( RND (1) * 10) + 1
770 IF P > 4 THEN 870
780 ON P GOTO 790,810,830,850
790 PRINT "A HURRICANE HAS
    WIPED OUT THE BEACH."

```

```

800 BE = 0: GOTO 870
810 PRINT "AN OIL SPILL KILLS
    HALF THE TURTLES."
820 TU = INT (TU * .50): GOTO
    870
830 PRINT "SOMEONE HAS
    STOLEN YOUR EQUIPMENT."
840 EQ = 0: GOTO 870
850 PRINT "YOUR BUDGET HAS
    BEEN CUT THIS YEAR."
860 MO = MO - 8000: GOTO 870
870 RETURN

```

ILLUSTRATION BY MARTIN LITTMAN

Send Us Your Programs

If you've written a program you'd like us to print, send it in. If we like it, we'll print it and send you \$25. Include a note telling us your name, address, age, T-shirt size and type of computer.

All programs must be your own original work. We cannot return programs. Please do not send disks.

Send your program to:

Basic Training
3-2-1 CONTACT Magazine
1 Lincoln Plaza
New York, NY 10023

The Slipped Disk Show



ILLUSTRATION BY CAMERON EAGLE

Hi there, hackers! By now, you probably know that I'm Slipped Disk, the world-famous computer expert. But I bet you didn't know that I'm also a poet! Listen to this:

My name is Slipped Disk, I'm a floppy disk jockey. All my answers are true (although sometimes they're sloppy). All the facts on computers, I probably know 'em. And when I am through, I can write you a poem.

But enough about verse, I think that I'd better, stop all this rhyming—and read the first letter. It comes from a fan and I'd like to salute her. She sent in a question about a computer. Her name's **Christine Paterno**, says computers are fun. She's ten and a half, from Seattle, Washington.

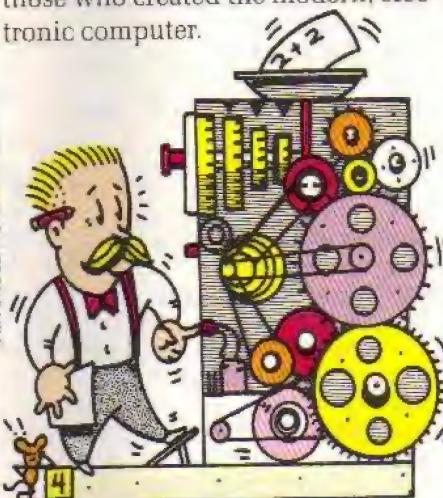
"Who was Charles Babbage?"

Christine, history can be a mystery. Let's see if we can clear this one up. Charles Babbage was an English inventor who lived from 1791 to 1871. He invented one of the first machines that could solve different mathematical problems. (In other words, an early type of computer.)

Babbage's computer was called the Analytical Engine. It was a mechanical device—a collection of thousands of gears and wheels that looked like the inside of a very com-

plicated clock. In 1832, a small part of the machine was completed, but the project was never finished. Even so, Babbage's ideas inspired many other inventors including those who created the modern, electronic computer.

ILLUSTRATION BY CAMERON EAGLE



And that's Christine's question about the inventor. I hope that she liked the answer I sent her. We've still got some space so I'll get to work, and answer this question from Flushing, New York. (Uh, New York.) It comes from **Roy Berenholtz**, I'll answer it today. Here is his question.

"What is an array?"

Roy, there's no cause for dismay, I'll explain an array. An array is a way of using a computer's memory to hold lists of data. An easy way to

imagine an array is to think of a piece of graph paper. Imagine that each row on the graph has a number and each column has a number. Each box on the graph can be identified with two numbers. For example, box 4,5 will be four rows down and five columns over.

An array creates this same kind of graph or table in a computer's memory. Of course, the array doesn't really look like graph paper, but it works the same way. Numbers or words can be stored in each "box" of the array. Often when you write a program that will handle long lists of numbers or words, you use an array. What else can you say about an array?

Now I hate to say it, but it's time to go. I'll see you next month in the next Slipped Disk Show. Remember, if you've got a question, you're taking a risk, if you don't send it in to your old pal Slipped Disk. I've got all the answers, so don't accept less. Just mail it right in.

Oh, yeah—here's the address:

The Slipped Disk Show
3-2-1 CONTACT Magazine
1 Lincoln Plaza
New York, NY 10023

See ya later, computators!

Slipped Disk's verse can often be worse.

Extra!

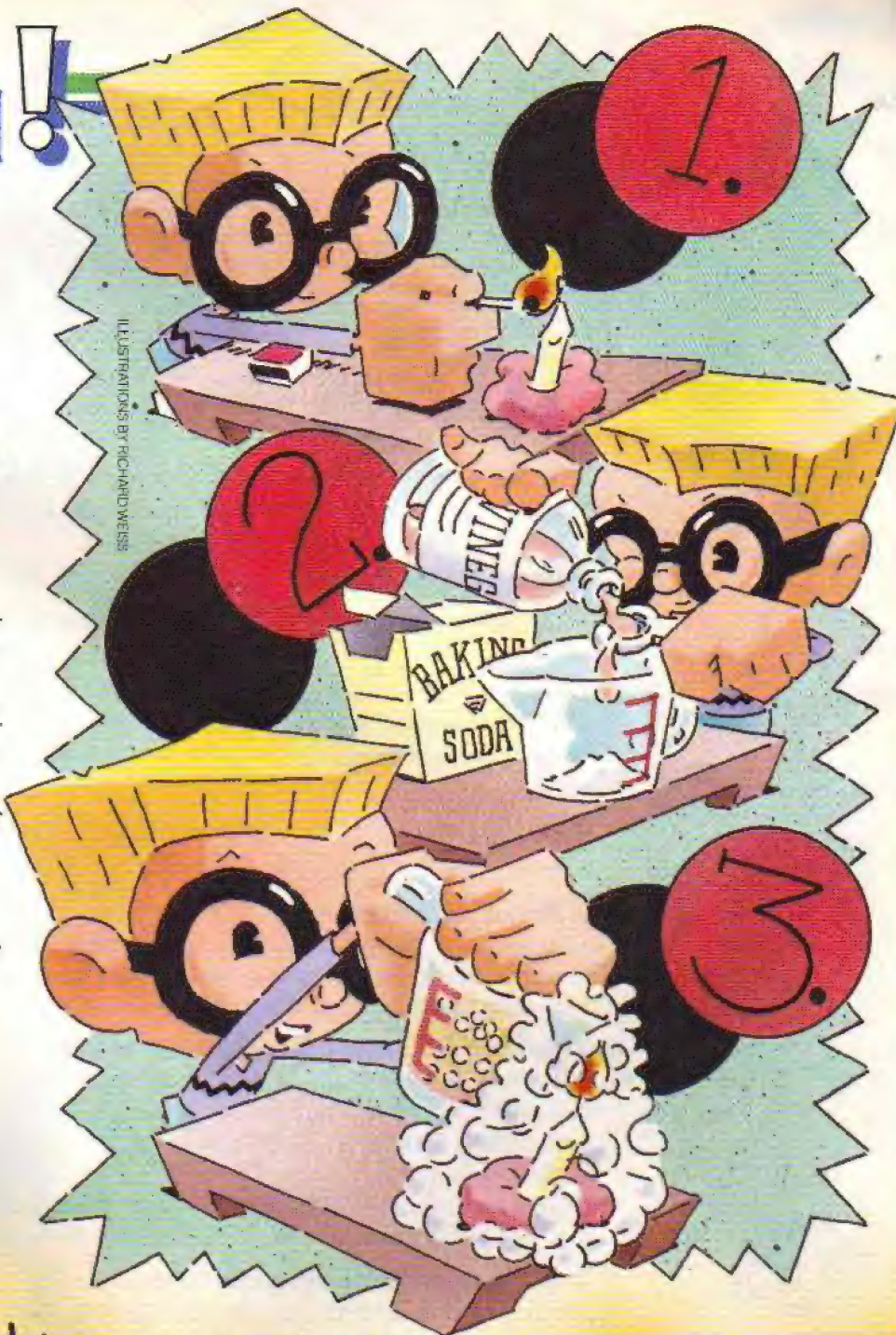
by Russell Ginns

Lights Out

MacGyver isn't the only person who can do neat stuff with science. Here's something that you can try at home. **Be sure to get an adult to help you with this experiment.**

- 1) Stick a small birthday candle in a lump of clay and light it.
- 2) Put 2 teaspoons of baking soda in a cup. Then mix in 3 teaspoons of vinegar. It'll fizz and make carbon dioxide gas. Put your hand over the cup for a few seconds to let the gas build.
- 3) Hold the cup next to the candle and slide your hand so 1/3 of the cup is uncovered. Now "pour" the gas over the flame. (The gas is heavier than air so it will "sink.") Be careful not to let any of the liquid come out.

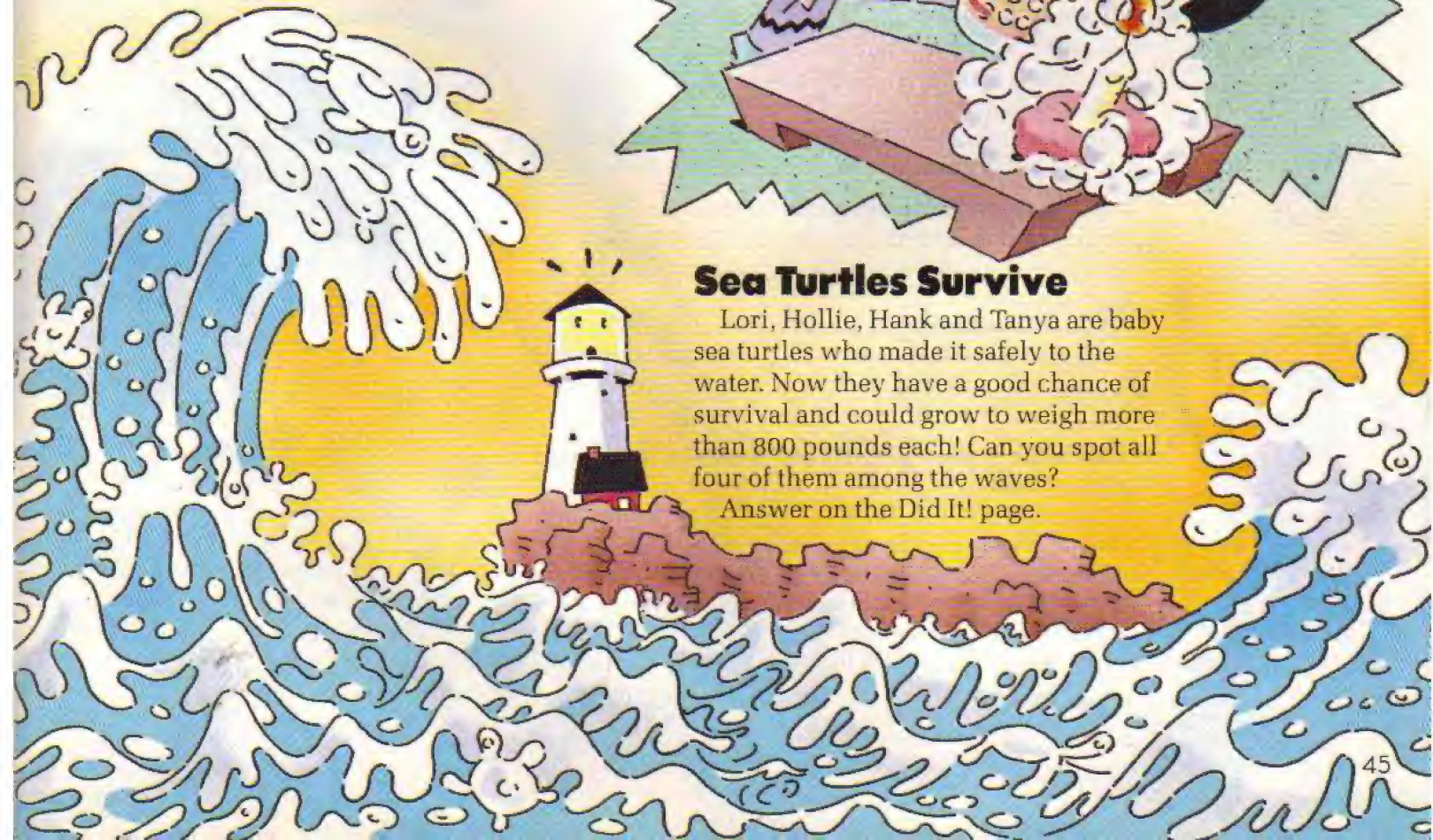
Presto! Your invisible fire extinguisher will make the flame go out. How come? Carbon dioxide smothers fire.



Sea Turtles Survive

Lori, Hollie, Hank and Tanya are baby sea turtles who made it safely to the water. Now they have a good chance of survival and could grow to weigh more than 800 pounds each! Can you spot all four of them among the waves?

Answer on the Did It! page.



GO FLY A KITE

Now that windy weather is here it's a good time to fly a kite. What, you don't have a kite? Here's a way to make one of your own. (You may need an adult to help you.)

What You Need

A big plastic trash bag. It must be at least 24 inches long and 16 inches wide.

Two sticks or kite dowels. Each should be 24 inches long and $\frac{1}{4}$ inch wide. They can be round or square. You can get kite dowels at a kite store, toy store or even a hardware store.

Ruler

String

Pen or waterproof marker

Tape and glue

Scissors

1. Make your pattern.

Turn the bag so that the long edge is at the bottom. On the bag, draw the little house shape you see here. Use these measurements. You have outlined half your kite.

2. Cut out your kite and attach the sticks.

Cut out the pattern through both sides of the bag. Do not cut along the 24-inch fold. Now unfold the pattern and you have a whole kite. Both sides are perfectly equal. That will make the kite fly better.

Glue the dowels to the kite as in the picture. Let the glue dry. To make sure the sticks won't fall off, tape them, too.

3. Making and attaching the bridle.

You're almost ready to fly your kite. But first you need something to attach the long kite-flying string to. That's what the bridle is for.

To make the bridle, cut a piece of string six feet long. Then put tape on the two points of the flaps. Punch a hole through the two taped points. Tie one end of the bridle string through one hole and tie the other end through the other hole.

4. Attaching your kite-flying string to the center of the bridle.

To attach the string, you have to find the center of the bridle. To do so, bring the kite flaps exactly together. Keeping the flaps together, pull up the bridle. Make a mark on the string right in the center. Now attach the string to the center of the bridle. Tie it with a very tight knot. If you've done everything right, your kite should look like the ones on the next page.

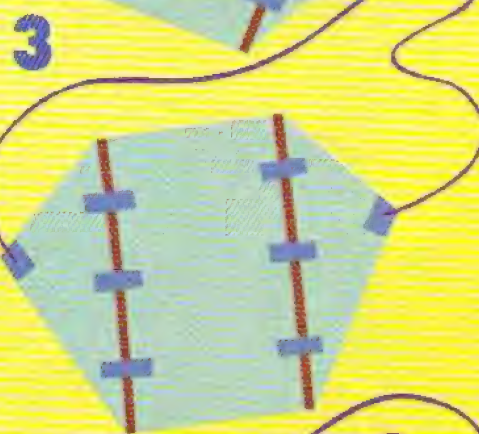
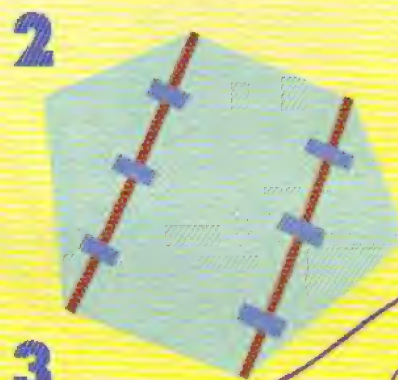
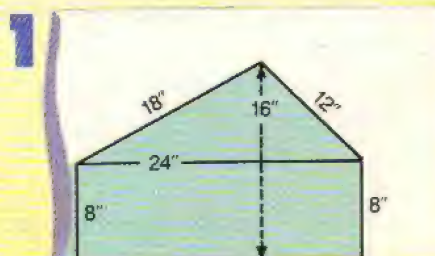


ILLUSTRATION BY MARY DUARTE



Tails

You can fly your plastic bag kite without a tail. But when the wind is a little strong, a tail will help keep the kite upright and well balanced.

You can attach a tail to your kite with safety pins, tape, staples or by sewing. Just attach the tail to the center of the bottom of the kite as you see in the picture.

Here are three tails you can put together with scraps around the house. Or use the leftover plastic bag material from your kite. Make each tail six feet long.

Paper Bunches

This is the easiest and quickest tail to make. Draw 10 squares on paper. Each square should be 8 inches wide and 8 inches long. Cut them out. Bunch each square at the center. Then tie it or tape it to a six-foot-long string. Attach the bunches 8 inches apart.

Patch Tail

Cut out patches of material 8 inches long and 4 inches wide. Then cut long strips of material. The strips should be $\frac{1}{2}$ inch wide and one or two feet long. Attach the short ends of the patches to the long strips. Attach the patches 4 inches apart. Then tie or sew the pieces of tail together to make one tail six feet long.

Wind Cups

You need a lot of patience to make this tail. Make it with paper or plastic cups and string.

First cut out the bottoms of 10 cups. Then, punch two holes on opposite sides of each cup. Then cut 10 pieces of string, each 8 inches long. Tie the ends of the string through the holes on the cup. The string should look like a bucket handle.

Now cut a piece of string six feet long. Thread it through the open bottoms of the cups. Then cut 10 pieces of string, each 2 inches long. With them, tie the cup handles to the long string, 8 inches apart.

Did It!

Sea Turtles Survive



Star Trick

The crew parked the *Enterprise* at Starbase Eleven.

Mathnet Mystery

The thief stole the items in pairs or items with the number 2. Here is what the thief took: The number 2 from the clock; Two number 2 pencils off of the desk; The pair of shoes; The pair of mittens; Volume 2 of *Mathnet Log*.

Code Breaker

Read backwards and break the run-on letters into words. The code says:

I have deposited in the County of Bedford in a hole six feet below the surface of the ground ten hundred and fourteen pounds of gold and thirty eight hundred and twelve pounds of silver...Paper number one describes the exact location of the hole so that no difficulty will be had in finding it.

Correction!

In our November 1988 issue, the puzzle called "Crazy Cash" contained an error. Alexander Hamilton, whose picture appears on a \$10 bill, was never U.S. President. He was the first Secretary of the Treasury, serving from 1789-1795. Thanks to all of our sharp-eyed readers who spotted our goof!

The Phoneymooners:

Alph spent \$30, then got \$60. So he was plus \$30 when he gave Throckmorton \$100. That means, the statue really cost Alph \$70.

Throckmorton bought the statue for \$25, then sold it to Alph for \$30. He was plus \$5, but when he bought it back for \$60 he was minus \$55. So when Alph gave him \$100 he ended up with a \$45 profit.

Next Month!

Here's what's coming in the April 1989 issue of 3-2-1 CONTACT.

Room to Breathe

You may have heard about the ozone layer and how it may be changing our atmosphere. CONTACT brings you the latest information on this important subject.

Skateboarding

There is science in skateboarding. And CONTACT found it! Find out why in this sporty feature.

Prehistoric Animals

Animals that have been around for millions of years still roam the Earth today! Sound amazing? You bet! But you'll understand why in CONTACT's photo feature.

Plus The Bloodhound Gang, Extra!, Factoids, Square One Puzzles and Games, Basic Training—and more!

WOW!

MICKEY AND MINNIE IN AN EXCITING NEW GAME ADVENTURE!



ARE YOU READY FOR...

- Falling spiders!
- Giant snakes! • Flying fish!
- Hidden treasures!
- Pirates! • Alligators!
- Bouncing blue things!
- And more!

TEAM UP WITH...

Mickey and Minnie in the first Disney game for Nintendo! Race with them as they rescue a MYSTERY FRIEND!

Are you fast and clever enough to win? The challenge builds as your skills grow! So get going with MICKEY MOUSECAPADE today!

© 1988 The Walt Disney Company

WARNING!

THIS GAME MAY BE HARD TO
GET AWAY FROM YOUR FAMILY!

This incredible Disney Mousecapade game is brought to you exclusively by

CAPCOM®